Metalsmith

Winter 87 Volume Seven Number One $6

Olaf Skoogfors
Bauhaus Metalwork
William Underhill
Cybernetic Jewelry
Rah, Rah, RA

J. Fred Woell

Photo: Keith Proctor

The Journal of the Society of North American Goldsmiths

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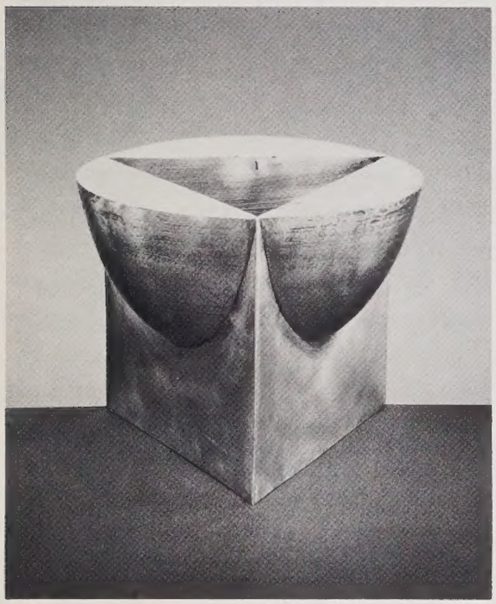

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The Good, the Bad and the Ugly

Architect Frank Gehry, whose 20-year retrospective opened in October at the Walker Art Center in Minneapolis, is notorious for clothing his buildings with corrugated metal siding and chain link fencing. Pundits have extolled his work as "powerful, brutal, ugly-beautiful."

Back in the 60s, Pop artist Jasper Johns used to make large lithographs of Ballantine ale cans. Though a venerable symbol in some circles, they're nothing much as compositional harmony nor esthetic coloration. Johns emphatically reaffirms his enmity toward "retinal" art—art that appeals mainly to the eye. "In any medium, I've never wanted a seductive quality," he has flatly stated.

Sculptor Eva Hesse's organic and tendril-like work was even characterized as Pathetic Objects—"The more you look at them" one critic equivocated, "the uglier and more interesting they become . . ."

Why would a heralded architect choose to incite the horror and reprobation of the neighbors? Why would a painter disavow the seductive properties of his medium? Why would a sculptor working in graceful materials want to render them ugly?

The word ugly comes from the Old Norse word for fear. It is a sense of trepidation, of risk, of the critical edge that intrigues artistic sensibilities.

The "sense of beauty" has always been a prerequisite for crafts. Potters fitfully seek the perfect glaze recipe, jewelers the correct faceting of precious stones and glassblowers the glimmer of refracted light trapped in their limpid material. But dealing only with esthetic stereotypes is like speaking in clichés; they often need to be reinvestigated.

Gehry explored the dichotomy of raw materials in "finished" construction. In his own house he stripped the interior of an old building down to its framing and left it that way, then built a new structure around it. Johns in his two-dimensional subjects, such as flags, targets and numbers, contested the illusion of paint. If he wanted to incorporate a three-dimensional form such as a broom, he would simply get a real broom and attach it to the canvas. Hesse used taboo materials such as latex, fiberglass and plastic for the ambiguity of their "near-ugly delicacy."

Which brings me to J. Fred Woell. While we were setting up the cover photo for this issue, someone in the photographer's studio remarked at the amazing transformation of corrugated cardboard when used as a backdrop to Fred's piece. Intrinsically, Fred's work, comprised of common, everyday junk, cannot be construed as "beautiful." It is disarming, disconcerting, to a degree even disgusting—the two-dimensional rendering of a bag lady's collection. It incurs dismissal from fear of refuse, fear of ridicule, a revolt of the esthetic sense. But one is compelled to look again, to see the work in different lights and different contexts on a variety of levels—a path that leads from disgust to recognition to insight. As art critic Lucy Lippard has observed: "The 'ugly' turning 'beautiful' in the public eye through a process of familiarity is a cliché of modern art appreciation which boils down to the unexpected (and therefore the temporarily unacceptable) becoming acceptable."

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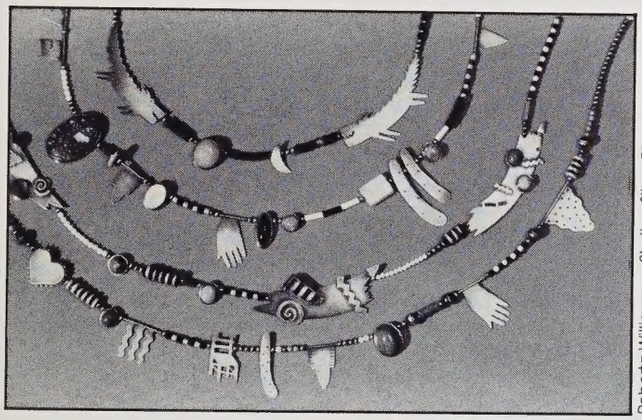

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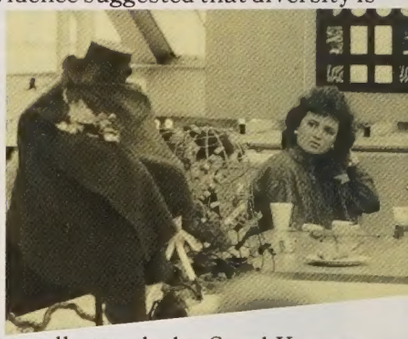
RECENT SIGHTINGS:

Pluralism in Metals

by BRUCE METCALF

One of the essential conditions in present-day metalsmithing is pluralism—a diversity of beliefs and goals within a single community. The field is unified by a common identity, even though disagreements persist. I can recall any number of arguments between jewelers who hold that the purpose of metalwork is to produce attractive commodities and teachers who maintain that the primary goal of the craft is esthetic expression. In spite of such disputes, the field is held together by our common use of material and technique, and our common history. Within the system of art schools and universities, however, one might imagine that there would be a strong consistency of opinion. The insulation afforded by the Ivory Tower should result in a certain sameness of vew point, shouldn't it? But when the students from three college-level programs met for a day of comparison and discussion, the evidence suggested that diversity is as strong within the academy as without.

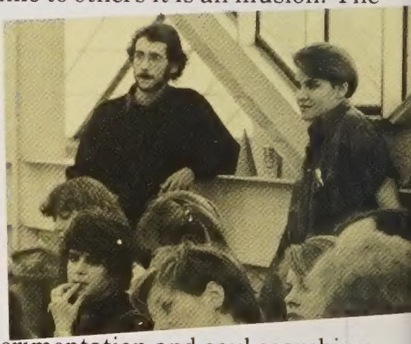


In November of 1985, Christina DePaul proposed that the metals students from Carnegie-Mellon University, where she is teaching, Cleveland Institute of Art, under Kathy Buszkiewicz, and Kent State University, where I teach, meet for a day of exchange and discussion. The day's format would reveal either the uniformity or the disparity between the programs and the students. We would give the same assignment to all our advanced students, and then meet some months later for a group critique. Because the programs differ in emphasis, the assignment had to offer fertile possibilities for a wide range of sensibilities and backgrounds. We decided on "What is 'metals' in 1986?", a deceptively simple yet potentially enigmatic question that would provide opportunity for critical analysis of conventional wisdom. We hoped that each student's solution would take a clear stance or would offer commentary on the limits and possibilities inherent in jewelry and metalsmithing. We resolved to offer minimal guidance to our students, thus forcing them to draw their own conclusions.

A brief description of each program is necessary here. The metals program at Carnegie-Mellon (usually taught by Carol Kumata, who was on leave last year) has recently been absorbed into the sculpture program, along with the ceramics and glass studios. Students are taught that media and process are put to the service of sculptural ends. The history of each craft and functional applications of craft (like jewelry and holloware) are downplayed, and technique is not emphasized. Instead, students are asked to become familiar with contemporary sculpture and use the scale and materials associated with metalsmithing in a manner appropriate to sculpture. The Cleveland Institute of Art, on the other hand, carries the history of John Paul Miller, the granulation expert, and Frederick Miller, the silversmith. Holloware is taught as a separate discipline, and there has long been en emphasis on superb technique and good design. Also, since the institute is an art school, students are expected to concentrate on their studio disciplines to a degree that a university student cannot. On a spectrum described by the three programs, Cleveland would be the most traditional. Kent State is somewhere between Cleveland and CMU. As a teacher I present a fair amount of technical information, but I do not require students to refine their craft. Instead I insist that each student find a fitting combination of technique, esthetic intent and media. At present, the majority of my undergraduates are investigating jewelry, although some sculpture and holloware is produced.

Thirty-seven students/convened at Kent with their completed works in February. CMU students all made sculptures, the largest being a circular rock wall on a wooden platform weighing several hundred pounds (Stephanie Ashton). There was also a series of minimal plywood cubes, (Kathy Moore), a chain welded around a rock (Kyler Black) and a series of small etched figures in a row, historical costumes with changing social mores (Rosa Silver). Kent State students submitted a range of works, from a gilded bowling ball on a wooden pylon (Holly Churchill) and a rattan and anodized-aluminum basket that fit over the head (Jill Forsman) to vessels made from heat-colored lathe turnings (Karen Turnidge). The Cleveland workds included nonfunctional holloware (Pam Argentieri), an elegant; but roughly executed neckpiece (Chris Jentner) and a box with an interior landscape reminiscent of Joseph Cornell (Paul Pavlifka). It was evident that students are shaped by the ideology of their programs.

The discussion was wide-ranging. The most controversial subject—and the clearest evidence that there is not a single viewpoint in the academy—was a proposition made by CMU student Jenny Commandaros. She declared that sculpture is inherently superior to metalsmithing, largely because there are fewer limitations imposed in a field that does not specify material or technique. Many students from KSU and CIA hotly debated this assertion. They maintained that any discipline, whether oriented toward concept or toward craft, is an adequate starting point for personal expression. That sculpture might offer more such starting points does not render it superior to metalsmith, these students argued. To some, the art/craft dichotomy indicates a deep divergence, while to others it is an illusion. The issue was discussed with great passion, but it was not resolved. Score one point for pluralism.



Other points that students made included:

- Holloware has been utilized so much in the past that it no longer serves as a suitable vehicle for ideas. In a sense, some students felt that holloware is exhausted as an art form. In addition, it was noted that holloware techniques (raising, dapping and stretching) are too labor-intensive, especially when compared to newer technologies like electroforming. As one student phrased it, "It's the difference between walking and riding." (I personally disagree with this conclusion.)
- Some students maintained that their schools discouraged fine craftsmanship. On the other hand, most students felt they had enough technical knowledge to serve their purposes. Some proposed that the craft of metalsmithing is a tool for self-expression, but must be regarded as a means toward an end and his little value in itself. The fact of being handmade was not regarded as a criterion for the status of art.
- The experience of an art school or university education was regarded as an opportunity for experimentation and soul-searching. Emphasis was placed on personal and conceptual development rather than technical knowledge. Students also debated the line between self-indulgence and authentic art-making. There was no clear concensus on this issue.

Later in the afternoon, everybody made two "sketches" of cardboard, paper, string and wire. Students welcomed the informal activity of working quickly, while talking with people from other schools.

The outstanding feature of the day was communication. Students were exposed to educational philosophies different from that of their own program, and the experience was an eye-opener. We were not searching for conclusions, nor were we expecting to find agreement. While consensus emerged on some subjects, others seemed impossible to resolve. Personally, I was gratified to see that art schools do not turn out completely uniform products, and students aren't necessarily clones of their teachers. Each program has a different "flavor," and each student provides spice. Ultimately, the stew that is metalsmithing becomes more intriguing every year.

Bruce Metalf teaches at Kent State and is a contributing editor to *Metalsmith*.

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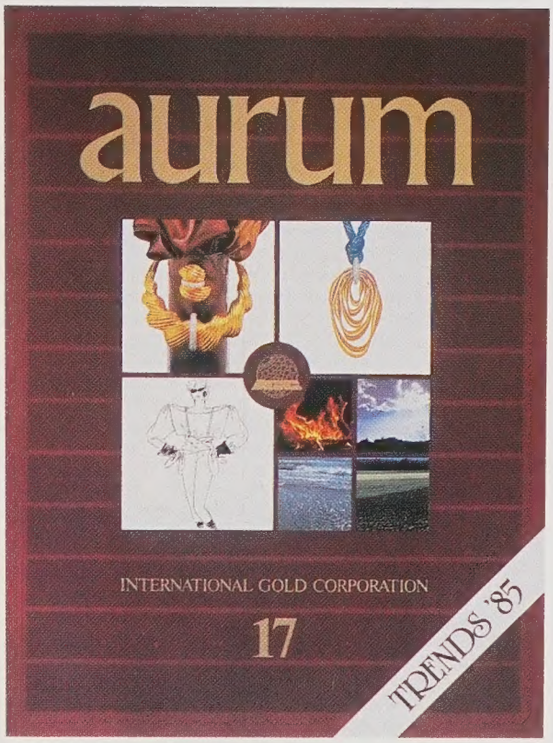

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INTERGOLD

by Ettagale Blauer

We invited Ettagale Blauer, formerly New York Editor for Jewelers' Circular-Keystone, *to attend the 1986 Society of North American Goldsmith's (SNAG) conference at Northern Arizona University in Flagstaff and to provide an outsider's point of view. Here is her opinion on the conference.*

The forces of good and evil jousted throughout the 1986 SNAG conference held on the campus of Northern Arizona University in the cool, thin air of Flagstaff but the designation of good and evil depended entirely on the participant's own point of view. As usual, "art" and "business" were the opposing factions; after three days of seminars, panels and a great deal of talk, both organized and informal, the gap between the two sides had widened even further. While honest differences of opinion make for lively discussion, this particular ongoing argument has become both entrenched and tedious, and threatens the very future of the organization. Accommodating two groups so diametrically opposite in their notions of why SNAG exists may not be possible; one sad but likely result will be a dropping out of members who find their needs unmet while the battle rages on or who simply tire of hearing this same argument, year after year.

While the sparring continues unabated, another split was proposed. Not only is the "art" faction in oppposition to the business faction, even going so far as to see a "taint" in the act of selling one's creations, it now demands to know, is it "art" (which is good) or "craft" (which is not). According to this faction within a faction, it's not enough to make beautiful jewelry; the pieces must be imbued with significance, with earthshaking meaning. This need can only be certified by the artist's inner thought process, which must follow certain specified lines, according to the speaker who proposed this idea.

Meanwhile, the jewelers continue to create, to produce innovative work. Three among them offered views of what's happening in the field today. Donald Friedlich's slide show of 11 jewelers' work started things rolling; Vernon Reed's visual presentation of his own explorations into cybernetics moved things along in a dazzling new direction and Michael Good's heartfelt talk on his philosophy as a production jeweler provided a direct refutation to the "don't sell" faction.

Professionalism, or the lack of it, is the key element that will make or break SNAG and this theme was present throughout the conference. The conference indeed is a microcosm of SNAG today, although, as an event, it is far more successful in attracting attendees than the organization itself. More than 350 people turned up in Flagstaff for the meeting. According to some highlights from a membership survey presented by SNAG president Michael Croft at the opening session, the entire organization comprises only 1700 people. That is a spectacularly high proportion of members attending an annual convention. But where are the rest of the metalsmiths who should be members of SNAG? Those missing members could contribute the dollars needed to begin purchasing professional services; to promote *Metalsmith* magazine; to pay writers more for articles; to fund the myriad activities of any *professional* organization. And where are the subscribers to the magazine? Other than the members of SNAG, there are only an additional 2000 subscribers. There should be at least three or four times that many. With additional subscribers, advertisers would find the magazine a more appealing buy. SNAG has existed for over 10 years, long enough to have decided on its mission in life. It's long past time to concentrate on fulfilling that mission.

One obvious way would be to release some of the statistics from that very interesting membership survey [see Fall, 1986 *Metalsmith,* p. 57]. Perhaps SNAG could take a page from Stefan Aletti's seminar given twice at the conference: How to promote yourself and your work; how to find a market; how to write a press release. With every seat taken at each of the two sessions, it's clear that members are eager to make a business of making jewelry. Only those supported by the academic world can afford to ignore the realities of the marketplace. Offering work to the public does not taint it; as Michael Good said, "If you choose teaching, you divorce yourself from the world. In the academic, community, they want to protect themselves from the reality of the world. There is nothing wrong with making a connection with the world. It does not have to be a giving up." On the contrary. Good believes that only the true artist, with a clear vision of himself and his work, can successfully enter the commercial world.

We no longer have patrons in the classical sense, such as when Russian czars supported the work of Fabergé; instead, we have hundreds of patrons called customers. Every time they purchase a piece of work, they are making exactly the same statement as Czar Nicholas did when he commissioned Fabergé to make another Easter egg. The customer admires your work and pays for it. What is all the discussion about? And what else is the university that pays Bruce Metcalf or Brent Kington (two of the panelists who discussed art and crafts and who were virtually arguing over how many angels can dance on the head of a pin) but a patron that permits them to create other work? Is it arrogance or ignorance that leads Bruce Metcalf to insist that jewelers take their esthetics from the art magazines, from the vocabulary of modern art when he says, "A piece should have a deep philosophy. A piece should change another person's thinking. Just making a piece look good is a naive view. It does not ask: what are we doing? What is the purpose of being a jeweler in this country today? What can you do besides selling your work?" And finally, "Is the function of art to please or to disturb?"

While that's valid question for a painting or piece of sculpture, it's a heavy burden indeed for a piece of jewelry. And one has to ask if there was ever a period during which jewelers made jewelry that was not intended to be used? In informal discussions following the Metcalf, Kington and Gary Griffin panel, I pursued the thought that perhaps these artists were so against jewelry being merely wonderful, decorative and salable not because they were accepting money for their art, but because jewelry takes on the wearer's own style and personality. Unlike painting or sculpture, jewelry is always changed by the wearer's choice of dress style or color; her shape and the color of her skin; the other pieces she wears with it. I think the "art" faction cannot bear seeing this interaction with their work and so turn either to pure sculpture or to jewelry that is too big or too difficult to wear. That the panel could seriously debate the question, "Is it okay for an object to have a utilitarian function" made it clear that this idea of wearer interaction surely grated on their refined sensibilities.

While some people left the panel discussion stimulated by the talk about art and craft, many more left disgruntled and visibly angry. The talk did not stimulate them, it left them depressed. The absolute antithesis of the panel's notions of art versus business was provided on the final day of the conference by goldsmith Michael Good. His lecture topic "Survival Skills for the Jeweler/Metalsmith" could have led to a nuts and bolts discussion of money, marketing and promotion, along the lines of Aletti's talk; instead, Good offered the audience a much broader, basic philosophy: the essence of what drives him as a creative person.

For Good, everything revolves around the 11 because none of them taught, inexplicably he included one who does indeed teach part-time to support her jewelry work.) The jewelry was beautifully presented and the talk was much more than just a slide show because Friedlich had interviewed each of the 10 (plus himself) and included some of the negatives the metalsmiths had overcome to reach their present positions.

There came up during the conference a phrase from the U.S. space program—pushing the edge of the envelope. As used in Tom Wolfe's brilliant depiction of the astronauts in *The Right Stuff,* it describes someone stretching his material or his milieu to what may be the breaking point—to go beyond the known limits of the medium. No phrase better describes Vernon Reed, SNAG's own spaceman. For a conference-wide audience, Vernon tried to keep the technical aspects of his computer-mediated jewelry to a minimum, and he succeeded for about the first hour of his talk. Using computer graphics, Reed includes a moving visual display in each piece of his jewelry. It is, he admits, just a baby step visually, but the work is a real break-through in introducing the dimension of time to the three dimensions of space. His workbench is a computer station. As Reed sees it, "Granulation was at the cutting edge for the Etruscans." In his own way, he is "expanding the envelope. Jewelry is a reflection of the culture we live in. The TV generation is accustomed to an avalanche of images. We have the ability and the need to acquire more information in a shorter time. This is jewelry for the information age." [For a synopsis of Reed's article, see p. 30.]

And now, a word about the panel on "An Introduction to "Form Beyond Function," with Brent Kington, Director of School of Art, Southern Illinois University, Bruce Metcalf, Assistant Professor, Kent State University, and Gary Griffin, Head of Metalsmithing, Cranbrook Academy of Art. Since this was billed as a sculpture panel, Brent Kington's statements that "function is not necessary" (in metalsmithing) and that "technology is used only to express an idea" could be accepted. However, the panel did spend much of its time presenting its views on jewelry and jewelry clearly must function, otherwise it is simply an *objet d'art.* It was not clear what Bruce Metcalf had in mind when he discussed such ideas as "instincts being tainted by knowledge," and said "we must demand sophistication in our thinking. This field (jewelry? sculpture? art?) is dominated by received ideas and concepts invented elsewhere. We're accustomed to having critics think for us. Think for yourself. Read the art magazines. Know the vocabulary of modern art." Gary Griffin said, "There is a difference between the way a sculptor thinks and the way I think." That may be, but the difference was not revealed to the audience. What the panel seemed to agree on is that art has a function and that function is to communicate esthetics of some type.

That evening, the conference members were taken to the Coconino Center for the Arts to attend the opening of the "Form Beyond Function" exhibition. One assumes these pieces represent the great ideas, the deep philosophy demanded by the panel, especially since they all contributed essays to the exhibition catalog. Yet here were pieces expressing ideas that had barely been translated into art and instead were more along the lines of, "I'm mad as hell and I'm not going to take it anymore." Other pieces were in the form of well-made but pointless jokes in metal. As is often the case with the current generation of metalsmiths, technical virtuosity far exceeded design inspiration. [An article on this exhibition will appear in the Spring 1987 issue.]

Perhaps the content of the conference was not so much the point as the opportunity to hear differing points of view, to know that people are thinking so passionately about jewelry and metalwork in general. Certainly one of the most delightful presentations was made by Jim Wallace showing the construction of the National Ornamental Museum. For the majority of the audience who will never have a chance to see the museum in person, Wallace gave us the next-best thing—a lively, humorous slide show tour of the hands-on work that made it a reality. Love and dedication were evident in every word; it was one of those rare talks that made you glad you were there and that created a true sense of community among the disparate members of the audience.

Ettagale Blauer has been writing on jewelry for 14 years, covering a broad spectrum from contemporary handmade to commercial work.

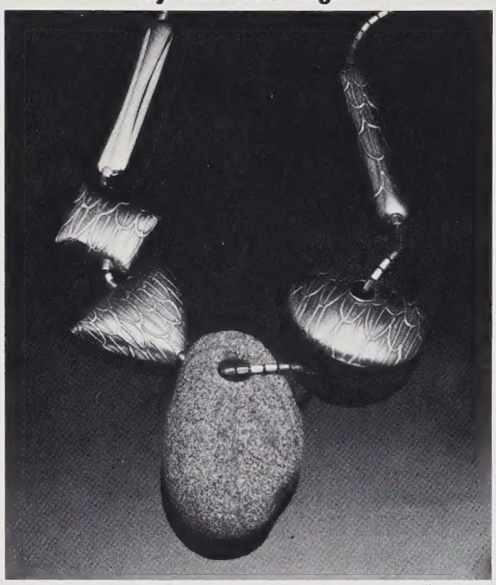
ROLL PRINTING

by Tim McCreight

Roll printing, or texture transfer, has been around a long time. The ancient Greeks and Romans used various dies and, of course, every well-appointed Sumerian had a cylinder seal with which to authenticate his signature. Both of these employ the same principle as roll printing. When you think of it, the most surprising aspect of roll printing is the fact that it took so long to become a part of the studio repertoire.

In its favor, roll printing has simplicity and versatility. In a matter of minutes the process can be observed and understood. It can be used on all the usual jewelry metals and has equal affinity for all sorts of objects.

The technique consists simply of squeezing a textured material into a sheet of metal by using the force of the rolling mill. It is a wise practice to protect the rollers by sandwiching the impressing material between sheets of copper, brass or silver. By thinking ahead to which sheet is hardest or which is annealed and which work-hardened, it's possible to more or less direct the force of the impression.



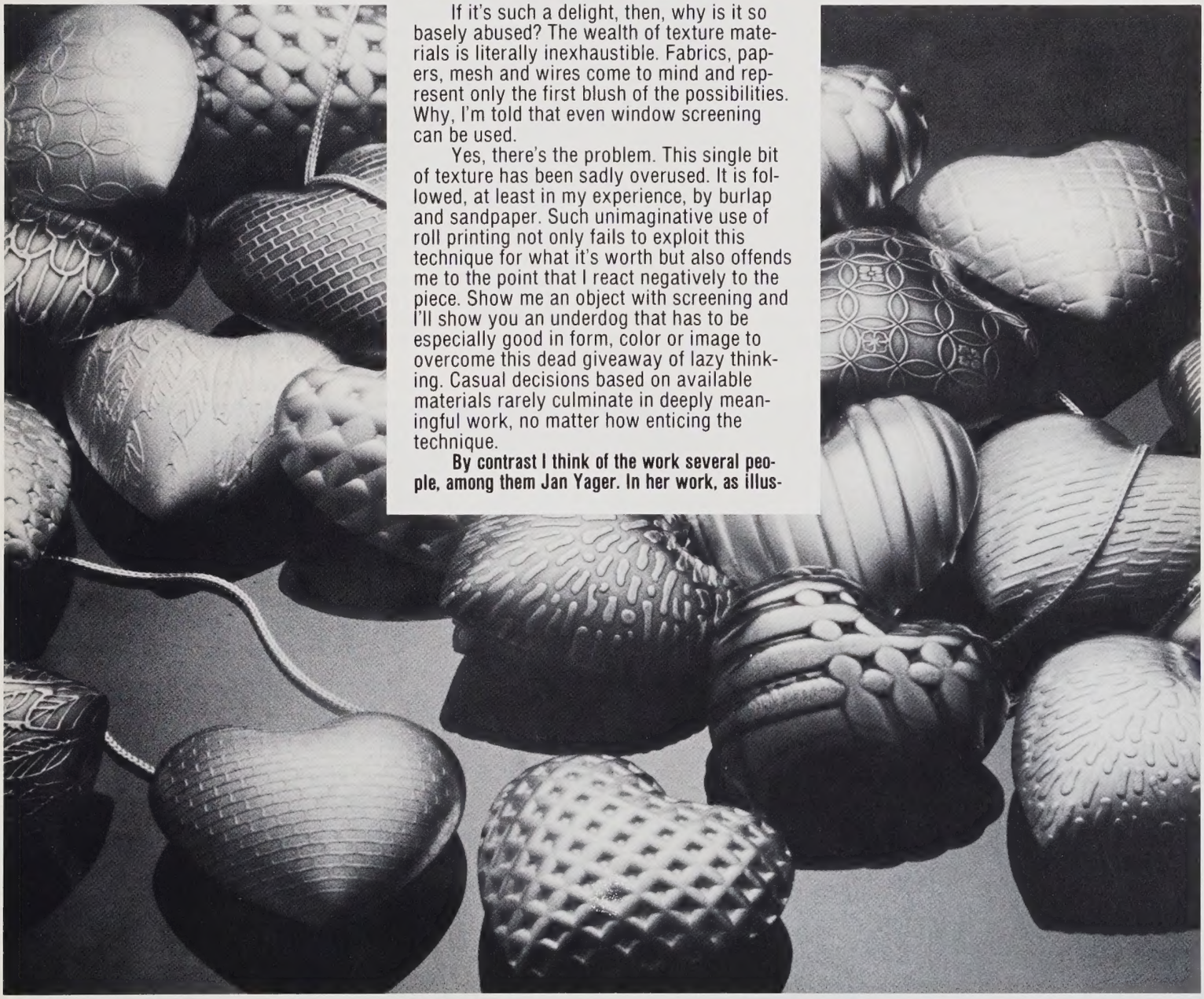
Jan Yager, *Heart Brooches and Necklaces*, sterling silver, 18k gold, 1985. Photo: Michael Dobey

If it's such a delight, then, why is it so basely abused? The wealth of texture materials is literally inexhaustible. Fabrics, papers, mesh and wires come to mind and represent only the first blush of the possibilities. Why, I'm told that even window screening can be used.

Yes, there's the problem. This single bit of texture has been sadly overused. It is followed, at least in my experience, by burlap and sandpaper. Such unimaginative use of roll printing not only fails to exploit this technique for what it's worth but also offends me to the point that I react negatively to the piece. Show me an object with screening and I'll show you an underdog that has to be especially good in form, color or image to overcome this dead giveaway of lazy thinking. Casual decisions based on available materials rarely culminate in deeply meaningful work, no matter how enticing the technique.

By contrast I think of the work several people, among them Jan Yager. In her work, as illustrated in the necklace shown here, the embossed surface takes its place alongside form and composition as an ingredient of equal importance. The highly polished pillow shapes present their recurring pattern in a series of alternate formats. These engage the viewer through their subtle differences. The natural stone and smooth-surfaced bead provide relief and contrast to the pattern and, in the end, focus attention on it. This kind of embossing is more than simply a quick way to break up a surface before "really getting down to work." It is an integral part of the sense of the piece.

Metalsmiths making the best use of roll printing do not rely on textures that fall into their hands but create matrices that can then be printed. Parent forms are created by etching, engraving, fabricating and stamping. This not only shows a respect for the rich possibilities of the technique but also allows the artist to enter the process at a deeper level. The talents of the metalsmith—gesture, image, scale, rhythm—all are at work in a proper matrix. And when all this is present in the initial form, the resulting impression can hardly help but succeed.



FADS AND FALLACIES

by A. Stiletto

Annually for many, not so frequently for most, the elite of what is loosely called the metals world packs its bags and ventures to some amiable university for that mysterious ritual, the conference of the Society of North American Goldsmiths. The locus this year was the mythic terrain of northern Arizona, home of the Grand Canyon, of Red Rock country that trolls the heroics of John Wayne and the tales of Zane Grey, and where the group resolutely pitched camp at Northern Arizona University, Flagstaff. Here was a fitting place, a fine spot to track the rising stars, discern the powerful constellations and scan the horizon for the big idea.

Soothed by the climate, this natural sanctuary and the prospect of professional enlightenment, the faithful established ties, bestowed kudos and shared secrets. Not all was bred of sobriety, though, as the members employed carnival-like diversions throughout their stay. They donned the persona of colorful clowns, lions roaring in defiance, barkers dispensing snake-oil bromides, acrobats with glittering slides and magicians, so many magicians, with their powers of alchemy, patination and electroforming. In the end, it is the members themselves who fascinate, for they are a curious lot. Bound together by the tenuous code of precious metals, forged over the centuries, they arrive in modern dress that disguises their gilded heritage. They come as tenured educators, master gurus and solitary artists, as entrepreneurs, scholars, designers and technicians. Some make jewelry, some don't; some work with metal, some don't; some know what a goldsmith is, some don't. They all come searching for something lost and for something not yet found. They exude the confidence in the search that will bring them back another year. Like the 49s of old, their mine is rewarded ambition.

Back in the real world, the search is validated by results. Amidst the insouciant speculation and creative temper at these meetings, there always creeps the shadow of reality, asking for credibility and a mortgaged security. 1986 was no different, as the anxiety for "real" success rendered succor to the big idea. Aspirants, seeking the glamour of the spotlight, offered their vision of the mother lode. They jawboned for an inner search, for the tabula rasa that is rid of artspeak and the dialects of the intelligentsia. They trumpeted the glories of fabricating a satchel of fanciful trinkets. They prophesized the Xanadu of electrodes, diodes, high tech and high touch. They painted a grim picture of the "market" as the Silver City of wet dreams.

The anxiety for the big idea, the readymade, foolproof formula, seems fueled by a latent fear of fashion. An onerous term, fashion connotes temporality, even glibness; it qualifies an idea as that which is to be dismissed in time. The big idea, on the other hand, resonates with permanence, an enduring truth upon which art, science and even commerce are built. But the search for the big idea rarely yields its intended results. And many have been vanquished in its pursuit. Time and experience offer a humble alternative in the existential satisfaction of knowing we are simply on the right road.

Jewelry's dual burden as an ephemeral form and a profession of dispensible ideas has understandably led many of its ranks to seek solace elsewhere, to escape the doldrums of the minor arts. However, maybe it's time to shed the paranoia that reinforces anxiety and to reexamine with confidence some of the "small" ideas that have slipped out of the limelight as a result of neglect or ignorance, to reexamine the "minor" achievements that have paved the path to jewelry's progress. Maybe it's time to define the direction rather than the goal.

For this writer, there is no better way to reclaim jewelry's future than by confronting the strawdog of "fashion." Already, the myth of fashion's impotence is under attack from all corners of the intellectual spectrum. Kennedy Fraser, fashion critic of The New Yorker, has said: "Fashion usually is neither named nor noted but is simply the lens through which our society perceives itself and the mold to which it increasingly shapes itself." What more relevant activity is there for jewelry than to engage social conduct through the perspective of the jeweler's "lens"? Roland Barthes, the semiotician and streetwise philosopher, has produced a tome on fashion's efficacy in which he concludes, "Countless objects that inhabit and comprise the image system of our time will increasingly derive from a semantics and will become the scene of any imagined universe." What more intriguing purpose is there for jewelry than to exchange the verbal language with a language of objects worn in quotidian parlance?

Jewelry's own practitioners have also contributed to "fashion" as a legitimate exercise. The "body sculpture" movement in Holland and England can be counted as an innovation in portraiture. The ability to enliven the body's facade with spatial empathy and structural form has taken the dialogue on jewelry's art to a higher plane, no less significantly than issues of context and appropriation have done for painting in recent decades. The ability to invest objects with personality traits common to the user is no less profound in the "frivolity" of much of this jewelry's esthetic than in the "hedonistic" furniture of the Memphis group.

On this side of the Atlantic, fashion is the very fabric of our democratic vista, where the sacred and profane exist in harmony, where the vernacular reigns supreme. The sign systems that obsess Barthes have no more fertile terrain than in the U.S., as our coveted individualism requires a full repertoire of imagery, both symbolic and narrative, to clothe its character. From the T-shirt and designer label to pop art jewelry, the modern talismans, the badges of controversy, the provocative portraits on a pin, nowhere are cultural myths more profusely illustrated.

What causes me to think about fashion is the memory of those cowboy boots, so ubiquitously worn at this year's conference. In the East, they appear as a style affectation, a kick-ass idiosyncracy. In the West, their natural habitat, they are a functional necessity, sometimes worn as a symbol of heritage, or maybe a metaphor for rugged individualism, or possibly the esthetic pride of a different sensibility. I have a pair somewhere in my closet. They are well crafted, fabricated from an ignominious hide . . . snake, lizard or something. They were made by an artist, Lama, Lucchese—I don't really remember who . . . I think I'll wear them more often.

A. Stiletto works in and around New York and writes a regular column on fashion for Metalsmith.

Photo: © Douglas Kent Hall, *Mesquite Texas*, 1973

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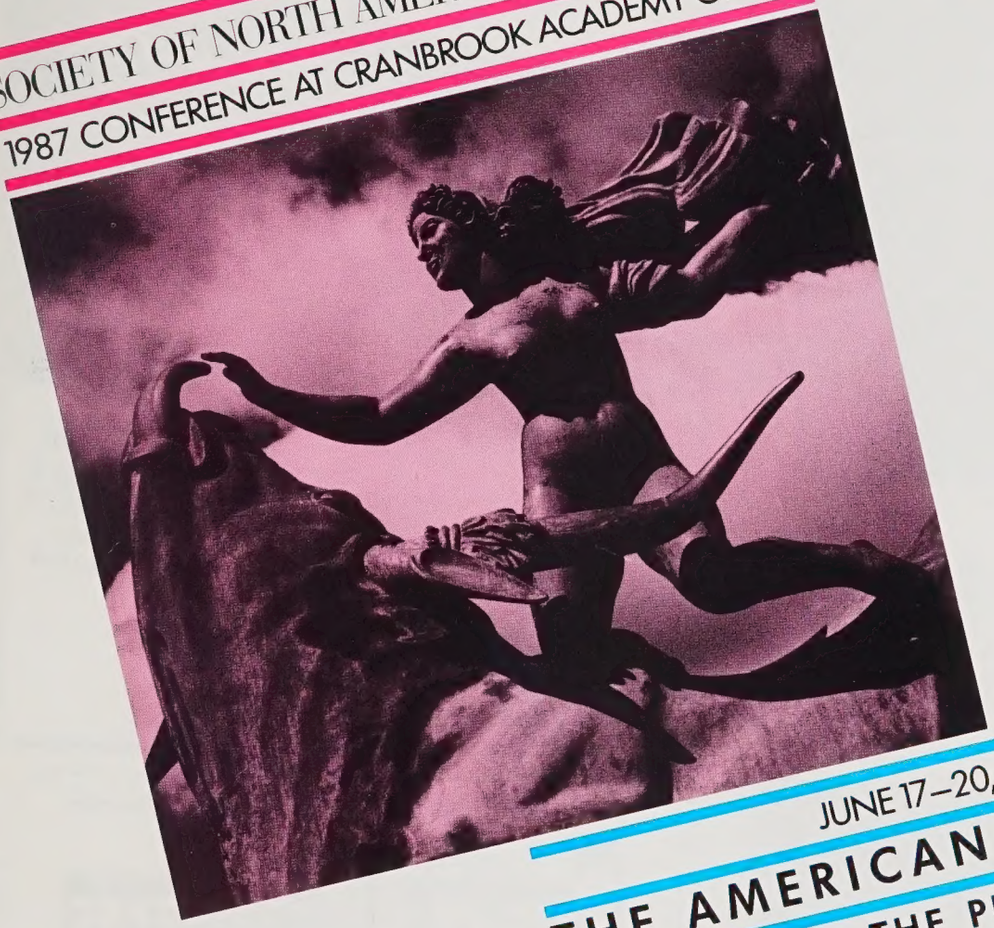

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Slow is Fast

by Richard Reinhardt

Born in Bredsjo, Sweden, June 27, 1930, Olaf Skoogfors initially came to the United States when he was four years old; his family permanently settled in Philadelphia before the Second World War.

I knew Olaf all of his adult life. He came to the Philadelphia College of Art (PCA) just after the Second World War when most colleges were experiencing great increases in enrollment as a result of the influx of thousands of returning GIs. Olaf, however, was not one of those wonderful, boisterous, eager and demanding ex-soliders; he was, rather, an extremely quiet and shy young man, who as a youngster had already studied drawing for several years at the Graphic Sketch Club. He was, from the beginning, clearly a marvelously talented person, but his gentle nervous manner (belied by his extraordinarily deep set, piercing eyes) was the quality I most remember about him as a student.

He was deliberately reticent, but also extremely thorough and it was in relation to Olaf that I coined my ever present paraphrase of Mies van der Rohe, "Slow is Fast."

While teachers (Kay Finkbeiner, Virginia Cute and myself) found them rewarding, Olaf had a difficult time dealing with crits and evaluations. It wasn't that he feared or did not accept criticism well. Instead, there was always a kind of impatience with himself as he would glimpse, or see, notions of how he could have done better, or more. He possessed a deeply rooted and insistent drive to challenge and surpass himself each time he started or completed a piece of work. He knew that he was a good designer, that his craft was excellent and that he did, in fact, lead the class, but he took great pains to keep it all inside of himself. All the time he was an undergraduate student, he remained a very quiet, shy, retiring and introspective person.

When, in 1953, Olaf graduated, we managed to get him a partial scholarship that would have enabled him to continue his studies at Rochester Institute of Technology (RIT) in the School for American Craftsmen. Unfortunately, his induction into the army prevented him from doing so at that time. We were all very concerned that this fragile young artist might somehow be harmed by this alien interruption so early in his career, but happily this was not at all the case.

During his tour of duty in Germany, Olaf took advantage of the situation by spending as much time as possible reading, drawing and enjoying a marvelous sense of emergence with his bride. When he returned, he was, at least outwardly, a completely changed person. He was openly gregarious and talked freely about his travels, work and plans to continue his education. His eyes no longer pierced; they simply twinkled and danced as he poured out his ideas and notions of how he would proceed to get on with his life. He did go on to RIT to study with Hans Christensen and quickly established himself once again as an excellent student. It was during this period of his life that he formed his deep and lasting friendship with two other great metalsmiths, Ronald Pearson and Jack Prip.

Soon after his stay in Rochester, he returned to Philadelphia, opened a small shop and commenced his relatively short journey to the very top of his profession. He was recognized early as one of those rare persons whose work clearly transcended jewelry as adornment and became a personal statement of art.

In 1959, he joined the faculty of PCA, and, later, after I relinquished the directorship of the Jewelry and Silversmithing Department to teach in the Industrial Design Department, we recognized that Olaf was already establishing himself as a leader among the gold and silversmiths, and we prevailed upon him to take over the metal area at PCA.

It was a fortuitous move. Olaf became an excellent teacher, well liked and deeply respected by his students and colleagues. By the late sixties, Olaf was chairman of the Craft Department, an area responsible for instruction in metal, wood, ceramics and fibers. His status as a teacher was constantly enhanced by the continuing preeminence of his professional work. He exhibited nationally and internationally. He was a founding charter member of the Society of North American Goldsmiths and was much sought after as a visiting lecturer at schools throughout the country. He was a marvelous model for his students to study and emulate, for, with all the pressures of the College and his professional fame, he never shortchanged them. There are many young designers who owe him a great debt for his insights, with respect to their education.

When I was Dean of the Faculty in the early seventies, I came to rely heavily on Olaf for his clarity of thought, sharp wit and true dedication to the Craft Department of PCA. All during this time, Olaf served his family with rare devotion, sat on many important college committees, was a source of much good humour with his didactic precision concerning parliamentary procedure and was in every way an exemplary professor.

It is significant to recall that while he gave so freely of himself to his family and the college, he continued to relentlessly pursue his extraordinary art. It was during these years that he produced most of these brilliantly conceived, keenly proportioned, wonderful, wonderful pieces of exquisite jewelry.

Olaf Skoogfors

Excerpts from: *Economic Alternatives for the Goldsmith*, a symposium held at Tyler School of Art, Dec. 1972.

I have a shop and produce jewelry for sale with a view to profit. Luckily, my generation has caught up with me, that is to say that the people who were in art school at the time I was and had "good taste" have now reached the point where economically they are able to purchase my pieces. So, if you wait long enough, you've got it made. In the meantime, you've got to figure out some way to make a living. . . .

I started my little shop in Philadelphia to produce so-called production jewelry, which I learned from Ron Pearson. I did not work for him, but when I attended the school for American Craftsmen I passed Shop 1 every day on my way home, and I used to stop in and visit. Finally I made such a pest of myself that they started treating me civilly and answering my questions. After a while I learned how to price and how to go about setting up a shop and how to make a living at this thing. I practiced this pretty regularly from then on, starting out a production line. In 1957, when I came out of the School for American Craftsmen, I spent the summer working on models. I had those models cast, I made a series of production pieces. In September of that year I went to my first shop with a suitcase full of jewelry. And I sold it, to my great amazement. The owner bought it and reordered. This was the beginning of my career in production jewelry. Since then I've had the opportunity to do many other

Opposite page: *Pin*, gold-plated sterling silver, carved ivory, 3½ x 2⅛", 1970. Private collection; **below:** Olaf Skoogfors in the studio

A Conversation with Stanley Lechtzin

Olaf Skoogfors and Stanley Lechtzin were good friends during Olaf's teaching years.

Q. *Can you elaborate on Olaf's experience at RIT and particularly his relationship with Ron Pearson?*
SL: He and Jack Prip, who was also there at the time, developed a very, very close relationship with Ron Pearson, even though they were both rather senior to him. In reality when Olaf completed his studies and left RIT, he had become close personal friends with both Pearson and Prip.
Q. *Can you pinpoint what Olaf would have taken away with him from these relationships?*

I think of my pieces as compositions, in some cases in alliance with the human body, but often as independent objects. This is particularly true in my pins which by their very nature allow this freedom.

SL: Pretty much what he said at the "Economic Alternatives" symposium: a knowledge of business practices and how one might go about producing work that would sell. And, eventually, that was Olaf's expectation, that he would come back to Philadelphia, set up a shop, which he did—and I met him at the transition point from running his own shop and selling his own production work to becoming a teacher at PCA. The latter occurred in the summer of 1962. We both began teaching in the fall at our respective institutions. But Olaf never really expected to be a teacher.
Q. *Can you speculate on the relationship between craft, design and painting (abstract expressionism) in the 50s and 60s and how that might have had an influence on Olaf's work?*

things. I've done some great compromises. I've had to accept jobs that are not in the least bit aesthetic, which nevertheless I will not apologize for. One in particular was a trophy for the gas meter company here in Philadelphia for their executive golf tournament. It's a model about 12" high of the old Philadelphia gas lamp.

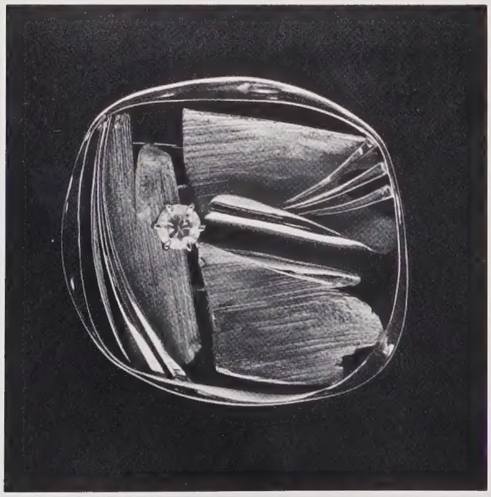
The one thing about making a living in crafts, jewelry in particular, is the fact that it depends on the lifestyle you want to pick. You can adapt your craft to any lifestyle you want to pursue. You can choose to be away from the commercial end of it and live as independently as possible, or you can be right in the center of the trade. I waver

Skoogfors (right) with Frederik Becker at PCA

somewhere in between, being very interested in earning a dollar and making money at what I'm doing and also equally interested in not working very hard. Believe me, I started out working 7 days a week, 12 hours a day. There's no way out of it. But the similarity is the dedication. The need and desire to do the thing you're going to do. Because one thing is for sure, it doesn't come to you. You go for it. You work at it and you work towards it. And eventually if you are lucky and you hold out long enough, you can make it. I'm still working pretty hard. I divide my time among many different pursuits: teaching, administration, as chairman of the dept., supervising production work, I have someone working for me part time, doing commissions, and then just doing the things I want to do, and fortunately now they're selling.

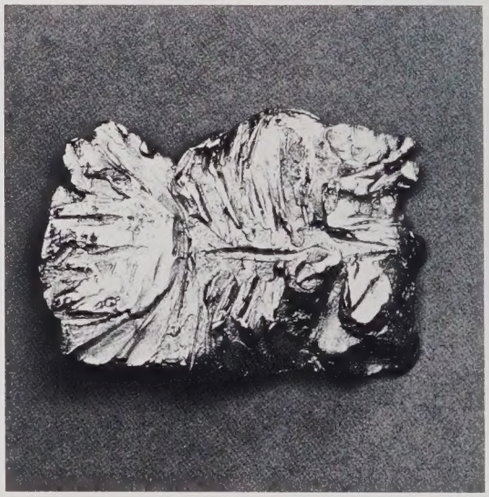
Two aspects of jewelry interest me the most, the image itself and the characteristics of the material from which it is made.

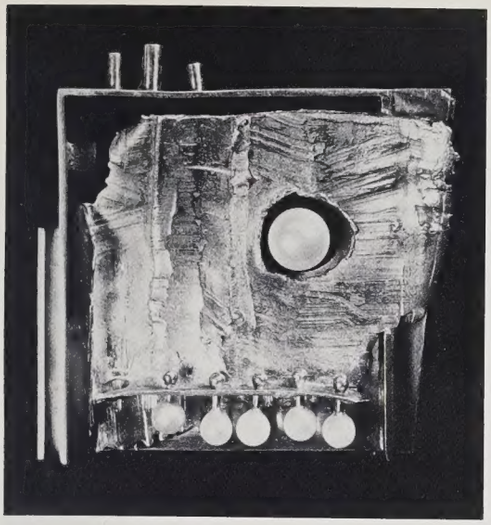
Opposite page, top row from left: Dimsdale Machine pin, gold-plated sterling silver, moonstone, 2 x 2¼", 1969. Collection: Matthew J. Williams Drutt. *This piece was named for Ellen Dimsdale, one of his students, during a summer session he taught at Haystack on Deer Isle, Maine. He enjoyed the way she thought and her machinelike pieces. She worked in plastic, and I particularly remember things she called "Refrigerator Art"—funny structures with magnets on the back so they could be hung on the fronts of refrigerators. This piece looks nothing like her work but rather honors her perceptions and her energy; Pin,* sterling silver, ivory, pearls, 2⅛ x 1¾"; *Brooch,* gold-plated silver, baroque blue pearl, 1973. Collection: Helen Williams Drutt; **center row:** *Pendant,* gold-plated sterling silver, African bead; *Pendant,* gold-plated sterling silver, ivory; *Pendant,* gold-plated sterling silver, ivory, 1973; **bottom row:** *Pin,* gold-plated sterling silver, pearls, 1969. Collection: Minnesota Museum of Art; *Pendant,* gold-plated sterling silver, cultured pearls, 1969; *Pin,* gold-plated sterling silver, cultured pearl, 2 x 2¼", 1975. Collection: Helen Bershad.
This is the last piece of jewelry that Olaf made. It reflects the look of pieces that he began to make after his trip to Japan. Instead of using casting for textures, he became interested in working directly on the surface of the metal, heating it to achieve "reticulation," chasing, etc. This was a response to the Japanese and what Olaf saw as their extraordinary sensitivity to materials. He began to explore materials directly, combining metals and using the color differences. The gold plating was a bow to the problems of economics; it was just too expensive to work in 14k gold unless the piece was commissioned and sometimes he just wanted the color of gold. Photos: Courtesy Helen Drutt Gallery and Judy Skoogfors

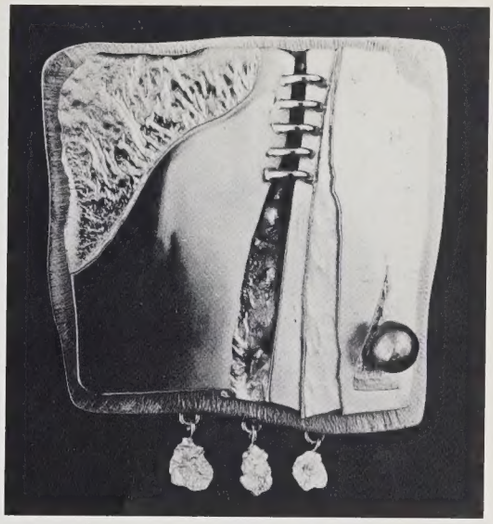
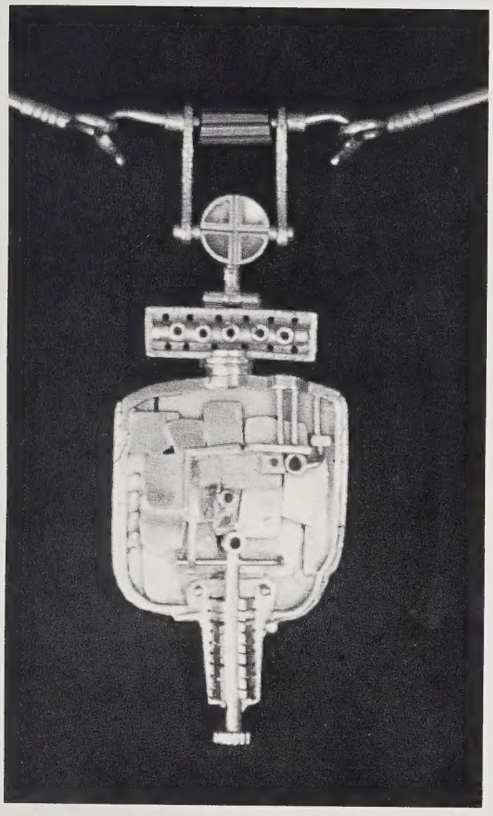


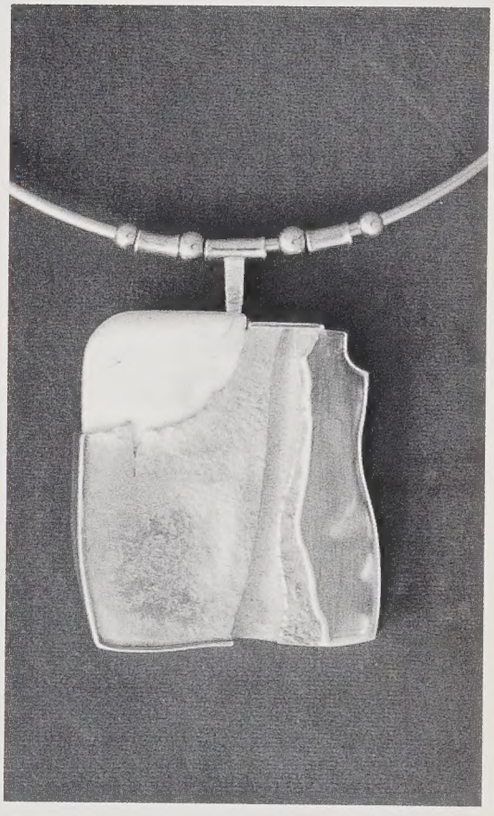
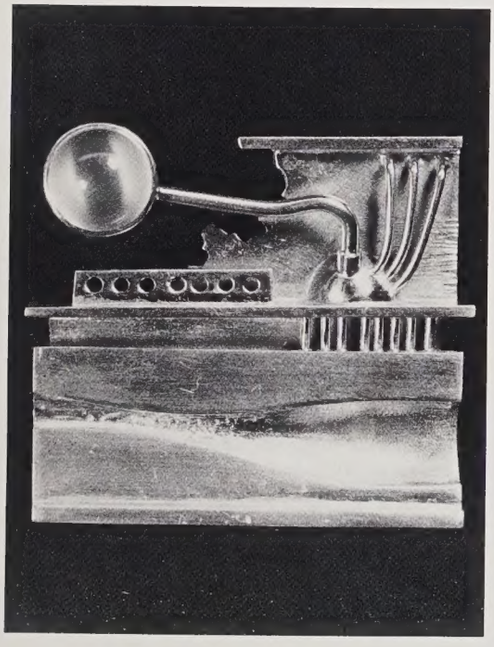
Pin, 14k gold, rutile, 1⅞ x 1⅞", 1965. *This was one of the few pins, not commissioned, that he made in gold. The central rough elements were cast, the frame and interior lines forged*

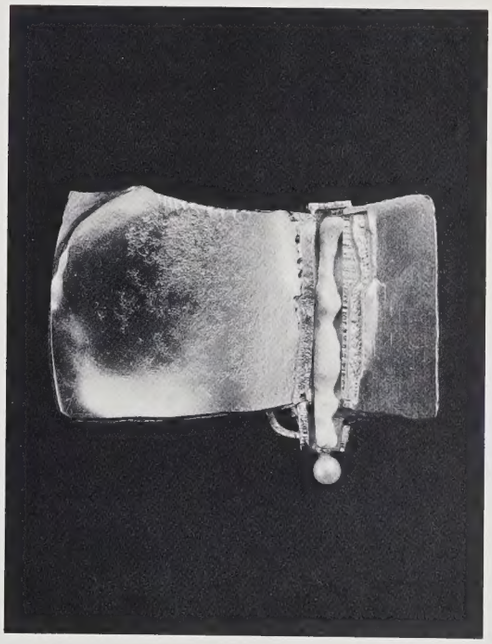
Reclining Torso, sterling silver, cast and gold plated. *This is one of the lost-wax cast pieces that were made in the 1960s. He was playing with the idea of sculpture, of bas-relief. He wanted to give the work a three-dimensional quality while also having it work as a pin with a flat back. He was attracted to the way in which Rodin cast from wax, the vigor of the textured surface and the low relief of Giacomo Manzu*

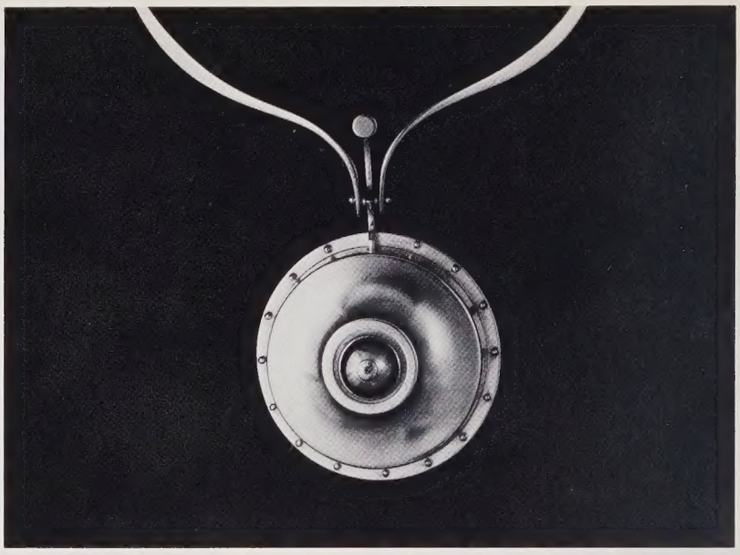








SL: Much of what we were doing partook of some of those same attitudes. I think the attitude of direct work in the medium was one that pervaded the art community. It wasn't abstract expressionist painting per se that affected our work as much as just that attitude, which you found in all the schools and all the studios, the feeling that you need not make careful models and careful drawings and precise plans, but you can just walk into the studio and begin making art. And that is a break from the industrial design attitude that permeated the 50s and early 60s, and when I talk about industrial design, I lump Scandinavian design into it, because the Scandinavian stuff that so influenced us at that time was designed by and large by architects. And it was designed for factory production. So, picking up a piece of metal and putting a torch to it, or picking up a piece of metal, cutting it and adding it to another piece of metal was something that wouldn't have been possible without the attitude I was just discussing, which was typified by the abstract expressionist painter, by the Jackson Pollocks, etc. I don't know that all of us were directly influenced by the painting attitudes, but the attitudes in society and in the art world do affect us. Olaf was much more aware of and much more responsive to the painting community than I would have been, or than I think Pearson or Prip would have been at that time.

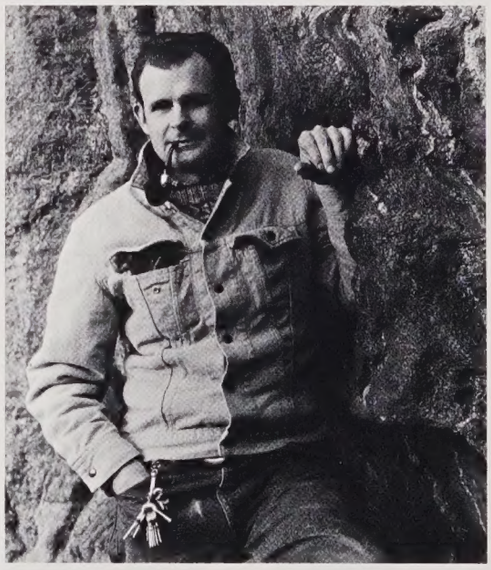
> Jewelry is very difficult to define when viewed historically, for anything from a boar's tooth amulet to the crown jewels is valid. It can represent faith, magic, position, service, wealth and even philosophy. It can therefore also represent personal statements, ideas and visions.

Q. *How was that manifest: did he actually have friends who were painters or did he go to museums a lot?*

SL: He maintained professional relationships with painters in the Philadelphia community. And we discussed at length the reasonableness of relying on or going to other media, other disciplines, as sources. I have always taken the position that it isn't reasonable to do so, whereas he would take the position that it seemed perfectly appropriate. And much of that was conditioned by his father-in-law, Louis Gessensway, who was a composer and a performer with the Philadelphia orchestra. Olaf was very interested in developing correlations between his work and the work of his composer/father-in-law. They shared a home, so there was that interaction. Louis Gessensway very often would describe Olaf's work in musical terms.

Above left: *Homage to Rico LeBrun,* gold-plated sterling silver with African beads, 9½ x 5⅝", 1974. *By dedicating a piece to a particular artist, Olaf was acknowledging a debt to that artist's influence on him. He admired LeBrun's line as well as the power and energy of his work. Such an homage confers license to the artist to explore another's imagery, thereby allowing him to move into what might be otherwise threatening territory. This piece incorporates African beads and actually resembles an African warrior's shield, invoking ideas about powerful primitive urges in man. Olaf read extensively in philosophy and psychology and was fascinated with psychoanalysis. He understood that he was controlling some of the symbolism and at the same time yielding to symbolism unconsciously released by another artist's work.*

Above right: *Pendant,* sterling silver, 14k gold, 1974. *This piece was made after Olaf's trip to Japan and after the belt buckle series where the breast was the design motif that unified the group. Of course any circular form is female, the life force, sun, earth, woman as a container of new life. There was another Japanese influence here. Olaf was interested in Japanese sword guards. The idea that artists, with the restriction of a particular size, round with two openings for the blade and locking device, could conceive endless variations in design and treatment, overwhelmed him. In the belt buckle series he set out to do just that, within a restricted format, to design endless variations on a circular theme. This pendant, though a break from the outside frame of the belt buckles, was a member of the same investigation of the breast design series.*



Olaf Skoogfors in Wissahickon Park, near where he lives in Philadelphia. Very typical pose—the pipe, the keys, the denim jacket and the natural rock background, 1969. Photo: Judy Skoogfors

> The combination of teaching and working is exhilarating. If you work in the shop all the time, you can get too isolated and insulated by what you're doing, and you don't have enough contact with other ideas.

Q. *The other side of one's personality has to do with how you look at society and how you look at politics. Was there any correlation between a political stand or social critique and Olaf's jewelry at the time?*

SL: No, I don't think his jewelry at any time became a vehicle for social comment. However, his knowledge of economics and his attitudes about economics governed his business life.

Q. *But was politics a constant source of discussion as much as painting or jewelry?*

> Jewelry offers me the opportunity to control artistic expression from concept to realization and provides me with the human body as a gallery.

SL: Olaf's life was one that was very committed to his political involvement with socialism. This was an ongoing commitment of his, and I would say a week wouldn't go by in which he wouldn't have had some active party activity to engage in. But I don't think it affected his art in any way that I could describe. I think Olaf agreed with me that he would find no way

Commitment and Control

by Helen Williams Drutt

A man who gave of his creative talents and his personal leadership to many, Olaf Skoogfors was the kind of person who helped form the American contemporary craft movement. In his early years in Philadelphia he spent many hours on committees, panel discussions, forums, and on academic committees at the Philadelphia College of Art.

He was a well-known international goldsmith. His work has been seen in the finest museums throughout the world and oftentimes he was a guest lecturer to foreign countries. His leadership helped develop a stronger sense of personal involvement for many in the field of art.

Olaf was one of the founding members of the Society of North American Goldsmiths and an invited exhibitor in Goldsmith '70 at the Minnesota Museum of Art, the first national exhibition sponsored by the, then, newly formed organization. During his lifetime he devoted much of his leisure to organizations which were supportive of his personal esthetic and artistic goals and SNAG benefited from this energy during the early 1970s.

Described by many as the dean of American jewelers, he had exhibited in over 80 national, regional and local craft shows since 1951 and beginning in 1962 his work was shown internationally. Among his many achievements and honors were the prize in 1967 and a one-man show at the Museum of Contemporary Crafts in New York in 1968. He represented the United States as one of "Three American Jewellers" [along with Stanley Lechtzin and Miye Matsukata] in Tokyo in 1969 and exhibited in the 500th Dürer Anniversary Exhibition in Germany in 1970. His work was included in "Philadelphia: Three Centuries of American Art" at the Philadelphia Museum of Art in 1976.

During the last six years of his life his work revealed an incredible sense of organization, he was influenced by artists in all fields who dealt with "the exploration of form and images as a personal quest." According to his wife, Judy, "he had his objectives under control, he no longer philosophized about the validities of where he was and what he was doing—he simply worked."

Olaf Skoogfors died at the age of 45 on December 20, 1975. These excerpts were taken from the 1979 retrospective exhibit, held at the Philadelphia College of Art and the Renwick Gallery and curated by Helen Williams Drutt. A memorial exhibit was also held at the Helen Drutt Gallery in fall of 1985.

to use his work for social comment. There are much better media for effecting social change than jewelry. Olaf was involved in esthetics when he sat down at the bench.

Q. *What if anything did Olaf invent in terms of design, and what survives as an influence?*

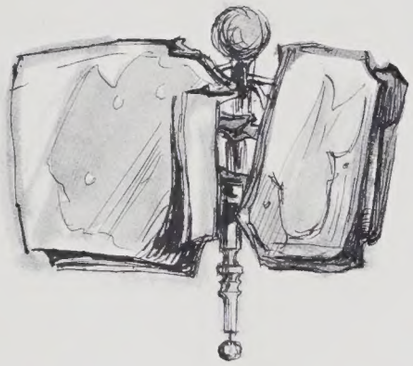
SL: In terms of esthetics, it's hard to put into words what is clearly Olaf Skoogfors. When I see it, I know it, when I see it turning up in other people's work, I know it immediately. But I can't define it. And I would say that that is perhaps its strength. It is purely a visual experience. But his legacy is there. It turns up often enough for me to know that somewhere or other people have been exposed to Skoogfors. There's a poetry there, that's the only way I can describe it. In many ways I respond to Olaf's work as I do to Miyé Matsukata's work. It was very personal, very sensitive. I feel that his major contribution was the enhancement of jewelry as an art form in this century. I think he's one of the real artists in the field.

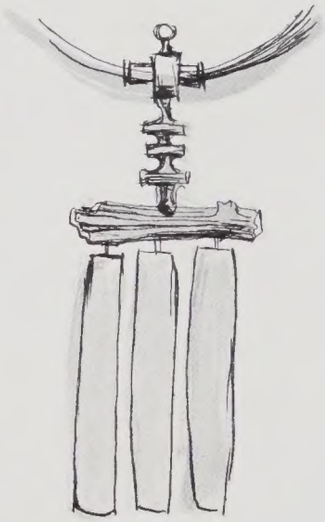
In more recent times I have been interested in the strength/vitality of barbaric, primitive and peasant design, and in my own way am trying to capture that vitality in my work. I believe jewelry must be wearable, but have a strong, forceful image as well. It should not just be casual decoration, but a reflection of the creator and the wearer.

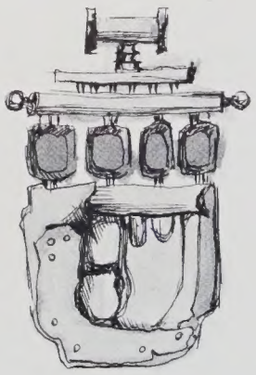
Q. *What was his contribution as a teacher?*

SL: He excited his students. He changed the lives of virtually everyone who studied with him. I don't think it was in the form of establishing unique curricula or providing unique technical information. I think he was a role model. I think that kind of wit and sensitivity and concern is the contribution he made in the classroom.

Stanley Lechtzin is chairman of the Craft Department at Tyler School of Art.

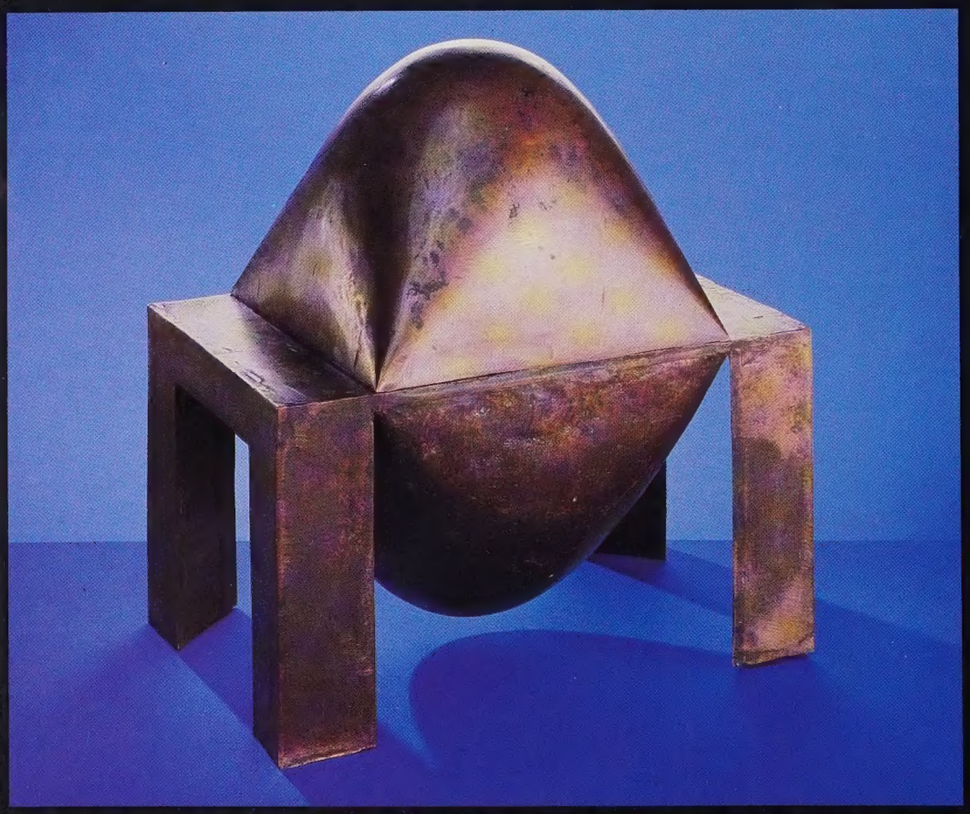






Quotes throughout by Olaf Skoogfors, 1969-1975
Captions and commentary by Judy Skoogfors

ORGANIC GEOMETRY



Top: *Early Flared Form,* lost-wax bronze, 35" h. x 9" diam., 1963; **above:** *East Valley Pot,* lidded vessel, lost-wax bronze, 12¾ x 12 x 8", 1973. Photos: Brian Oglesbee; **opposite page, top:** *Danu,* bronze, 5½ x 7½ x 7¾"; **bottom:** *Willendorf,* lost-wax bronze, 7 x 10½ x 8¼", 1983. Photos: Steve Meyers

WILLIAM UNDERHILL

by Ed Lebow

William Underhill came to bronze pots just as his teacher at the University of California at Berkeley Peter Voulkos was leaving clay ones. After a decade of stacking, slashing and cantilevering pots—attempting to stretch their skins into >

more evocative sculptural forms — Voulkos had tired of the confined esthetic. So, in 1961, he helped establish a small foundry at Berkeley where he began casting sculptural forms in bronze.

Underhill was one of the few artists who used the foundry to make pots. The process was plain. He would throw a thick-walled clay vessel on the potter's wheel, model its interior surface, then coat it with wax and cast that wax shell in

Vessel with Lid (exploded mailbox), bronze, 17½ x 27½", 1962

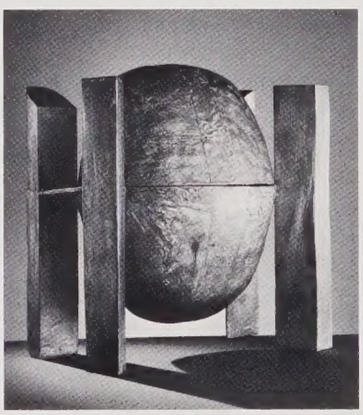
bronze. This method, in effect, turned the clay pot inside out. Indentations and incisions in clay appeared in relief on the surface of bronze. The results were highly embellished, almost ritualistic, textures on organic forms. In the 1962 "Young Americans" exhibition of the Museum of Contemporary Crafts, Underhill was awarded the Bronze Medal for a form that looked like an exploding mailbox—all tattered planes and segments of spheres. This was one of the last to follow the Voulkos lead of taking vessels apart at the seams. For in 1963, he came up with two configurations that have occupied him right up to the present.

One, *Flared Vessel*, perches like a tornado on a gumdrop-shaped base. The other, *Lidded Vessel*, looks like an egg suspended between four posts. The primary attraction of both is their curious transition of shapes. That transition is dramatic where the stem of the flared vessel connects to its domed base, but clumsier where the planar legs of the lidded pot abut their volumetric core. The legs clearly support the lidded form, but their broader visual purpose is less apparent. As a whole, the elements of these forms lack a unifying visual logic.

Throughout his early works, Underhill experimented with different configurations of legs and bases, but they invariably assumed the role of physical conveniences—small platforms or plinths raising the bellies or stems of vessels a few inches in the air. Underhill easily could have solved the problem by making flat-bottomed pots, but he gravitated toward images that raised this question of form and structure. He seemed to be searching for ways to merge the two, and thus heighten the sensual impact of the organic shapes that attracted him.

Despite these apparent weaknesses, however, these early forms contain the seeds of the compelling organic geometry that emerged later. For they manifest few pure shapes. Spheres are always slightly parabolic—as though stretched by some hidden pressure. And the walls of the flared vessels don't graduate evenly. Their bulges and spirals convey the impression of viable growth. One senses that their surfaces contain the potential of living forms.

That sense developed even further when Underhill turned from clay to wax originals. Transferring clay to wax had forced him to make the forms in



Untitled, lost-wax bronze, 16 x 15½ x 10", 1964

negative and envision their eventual positive. Working directly in wax, Underhill was able to see the form as it would appear in bronze. The translation became one-to-one. It enabled him to work the interior and exterior surfaces simultaneously. That hadn't been the case with the clay originals—he had simply applied textures to the inner wall of the clay hollow. The forms often appeared to be little more than vehicles for decoration. With the wax originals, the method Underhill used to fabricate the image rose to the surface. The areas he composed of sheets were

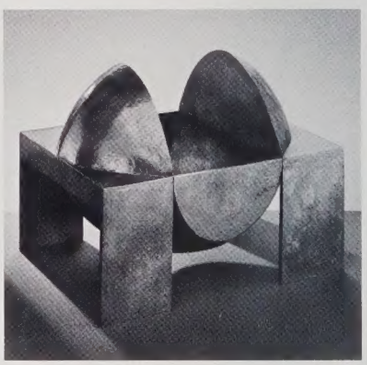
Later Flared Form, lost-wax bronze, 14 x 22½ x 18", 1971

smooth, as were the segments derived from molds. By contrast, hand-modeled portions conveyed a meticulous tactility. In the early flared vessels, Underhill applied all of these techniques, gradually coming to terms with their visual impact on form. Yet their conglomeration in a single image suggested a coopered appearance. Alternately placid and rumpled, these patchy surfaces encouraged the eye to stop and go, to sporadically skim the high spots for nuance or to stall completely where shapes converged. Polished areas crumbled into pocks and pittings, so one's eye tended to wander aimlessly.

Flared Vessel, 1971, changed all that. It was no longer a patchwork of techniques, but a form modeled piece by piece out of soft dollops of wax. More than simply giving the surface an "all-over" texture, this method infused the form with the simple identity of its means. The pot was pinched into shape. Its accretion of dabs acts as the external skeleton of its form—embodying both structure and shape. In that sense, its technique is its expression and that expression the sensual force of organic growth. No longer the self-contained twister of eight years before, it flares almost to the point where its rim begins to curl back upon itself. The dabs pace the eye across the delicate surface, sweeping inside and out. This steady, almost hypnotic, movement adheres the eye to the form, conveying the full experience of its volume.

As I mentioned before, this wasn't the case with previous forms. Their patchy surfaces tended to confine the eye to the transitions of shapes. Here the shapes don't merely converge, they interact, resisting yet appearing to generate one another. But this form didn't mark the end of the disparity between elements within Underhill's pots. Problems continued to crop up whenever he combined planar with organic forms. Occasionally, he would mount a flared vessel atop a tablelike base. Or, as in *East Valley Pot*, the 1973 version of the lidded vessel, he would join the egg with prismatic legs. But the transition was considerably less conspicuous than it had been previously.

For one thing, the entire surface was smooth. The egg no



Sliced Forms, lost-wax bronze, 8 x 10 x 7¾", 1981

longer had to appear handmade. Underhill's eye had turned to measuring proportions and developing the form through its taut surface. The shape is more pyramidal than bulbous—fertile rather than fat. And this subtle triangularity is echoed by the prismatic legs.

This geometry wasn't the cool study of the math books, it came from warm models in the flesh and fields. Sensual rather than analytie, anthropomorphic images such as *Sliced Forms*, 1981, nevertheless fell into an increasingly formal net. They came with few anecdotes and virtually no surface decoration. They were simply form, without all the intellectual sweat. Underhill had resolved the disparity between base and form

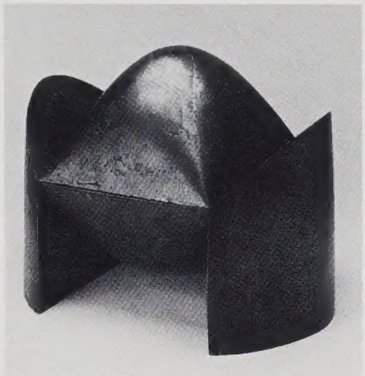
by infusing each with some of the visual character of the other. The legs of *Sliced Forms*, for example, are mere planes. And more planes grin across the pared face of the central sphere. Together they speak the language and proportions of cross-sections while the belly of the crablike form conveys volume. Its roundness is parabolic, its fullness elastic. Yet this elasticity is contained by the exactitude of the arched planes that segment the form. We see its warm-bloodedness sealed or embodied by geometry. Instead of arousing the eye with complex, highly mobile surfaces, as the flared—"pinched"—vessels do, it offers complex configura-

Hips, lost-wax bronze, 9¾ x 12¾ x 10", 1983

tions whose surfaces are no more than smooth geometric facets and membranes—a fusion of anthropomorphic and architectural form.

Those looking for connections with 20th-century art and architecture may want to refer to Brancusi, Arp, Giacometti or Louis Kahn, but Underhill's esthetic is that of the vessel. His geometric meditations depend on the inner and outer surfaces of open forms. And the simpler the better.

The 1981 *Moker Series* of bowls were the first to successfully combine planar with pinched components. They comprised a basin pinched out of small medallions of wax perched on a cube. Like the flared vessel from 1971, the technique is the expression. In this instance, however, the expression is less allegorical. It isn't growing. The classical shape of the bowl turns faintly inward at the rim. The pressed medallions of wax persuasively detail the form. The form itself evinces a tactility that one's eye practically feels. This quality of the hand comes across so



Kabuto, lost-wax bronze, 10½ x 13 x 9½", 1984. Photo: George Erml

strongly because Underhill treated the surface after the cast in a way that would reveal a sense of plasticity. The mossy bronze, sealed beneath a sheen of wax, appears moist, pliant, as though it could still be altered by the slightest touch.

This sense of malleability also appears at the junction of the cubic base and hemispheric bowl. The corners of the cube are peaked. Between them the top edges of the walls are slung parabolically, as though the bowl had simply shaped, even melted, its own nest out of the underlying block. These small details of accommodation not only permit the cube to serve quietly as a base, but they describe the efficient union of the two forms.

Underhill has managed to carry that beautiful efficiency even further in his most recent pots. The result—as often occurs when art conveys maximum effect by minimum means—is a degree of abstraction that overcomes the relative confines of the medium. In the pots Underhill made before the mid-70s, the forms invariably served the idea of the vessel. In recent works, however, that balance has shifted. The vessels are at the convenience of Underhill's ideas about form. The pots have become vehicles of geometric sensuality. They make virtually no distinction between the visual roles of their physical parts. Tops and bottoms act intrinsically as form. And in such works as *Hips*, 1983, and *Kabuto*, 1984, there is little doubt what kind. These pots are girls. The once spindly legs of the 1963 *Lidded Vessel* have evolved into fullsome thighs, the bulbous central egg into the sensual volume of a pelvic traingle. *Hips* is the more voluptuous of the two, yet its eroticism is tranquil, almost meditative. Its curves are gentler, softer, than the hard-headed distensions embodied by *Kabuto*, Japanese for helmet. At the same time, it is denser, more compact. The wider arch of its cannister lid doesn't force the eye into quick turns. Its seams, surfaces and edges constantly convey attention in easy sloping arcs downward toward the sensual junction of its belly and legs.

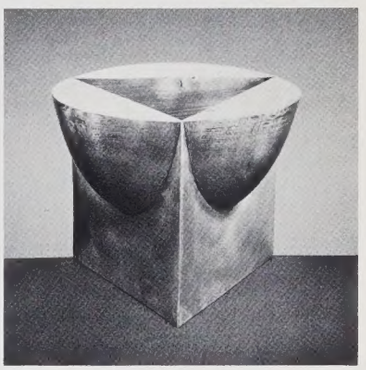
That concentrated geometric sensuality appears again in *Willendorf*, 1983. The bronze precedent for this pot may be the lobed ritual vessels from Chou Dynasty, China, but its inspiration is sea bubbles clustered as foam, or cells as zygotes. Underhill owes its metabolic configuration to "the closest stacking of spheres"—nature's way of stabilizing round volumes in stacks. Here the balls overlap and merge into a tetrahedral arrangement whose structural efficiency appears to be the very essence of grace. Its rhythmic union of globes pulses the eye in short arcing beats over and around its surface. All those soft and easy

Knife-Edge Pendentive, lost-wax bronze, 7⅜ x 6½ x 6½", 1984

undulations stop abruptly at the short planar neck that rises intractably from the inturned center of the cluster.

Underhill didn't confine this compact geometric expression only to lidded forms. He also used it in such open vessels as *Knife-Edge Pendentive*, and *Triangle Yantra*, both 1984. Unlike the earlier "pinched" bowl on a cube, these exist as hollowed chunks, rather than stretched membranes. Expansiveness is replaced by weighted mass. Instead of reaching out and enveloping empty space, their austere proportions compress it into surfaces and intervals of dense form.

As with *Hips* or *Kabuto*, they compel the eye by their



Triangle Yantra, cast and welded bronze, 7¾" h. x 9" diam., 1984

matter-of-fact anatomy, whose configurations are self-defining. For they express simply the physical requirements of their merged shapes. *Pendentive* reveals the transformation of a cube into a dome and then the accommodation of that inverted dome atop another cube. *Yantra* shows the extraction of a prismatic core from a hemisphere. The prism is both surface and hollow—a riddle that keeps the eye moving inside and out, constantly weighing, measuring and trying to figure the small difference.

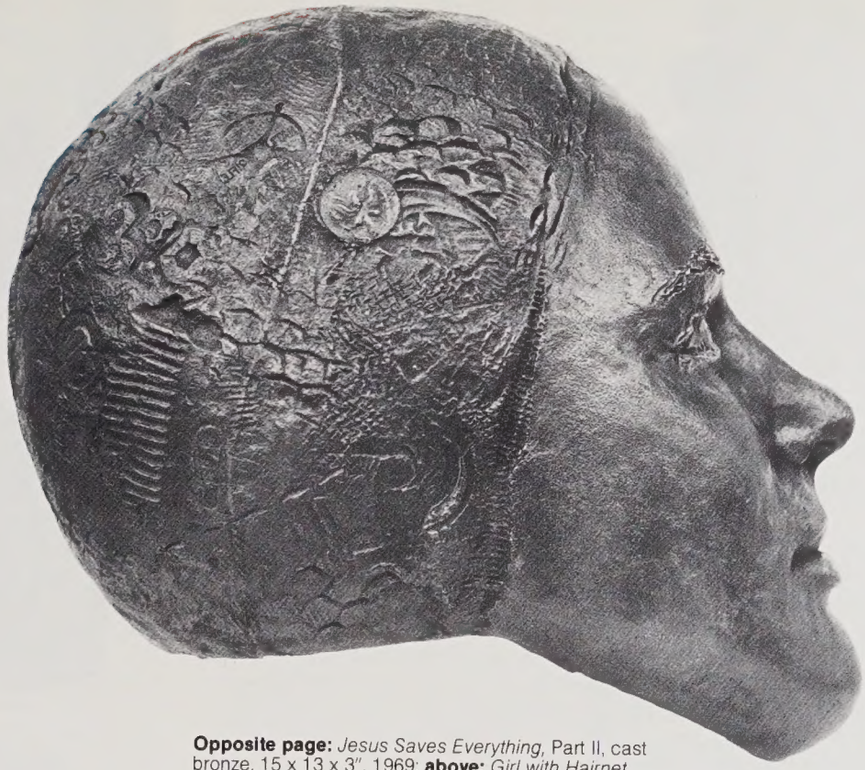
The beauty of Underhill's vessels is that their interlocking shapes flow together as though the very seams and transitions were arranged by some underlying structural order, one that nevertheless works from the surface inward. Its poetry is sensual, meditative, metered by the plain requirements of fitting form around hollows.

Ed Lebow writes occasionally about art.

William Underhill teaches sculpture in the Division of Art and Design at New York State College of Ceramics at Alfred University.

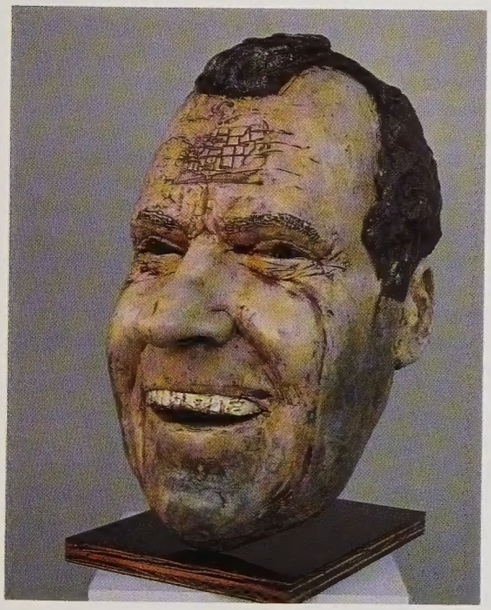
NEW AMERICAN GIN
GRISWOLD
ERIE PA U.S.A.
ADAMS
DUBUQUE IA

by Michael Dunas



Opposite page: *Jesus Saves Everything,* Part II, cast bronze, 15 x 13 x 3", 1969; **above:** *Girl with Hairnet,* cast bronze, 8 x 5½ x 8½"; **below left:** *Noxin,* cast epoxy, 21 x 11 x 13"; **below right:** *Helmet with Nose Guard,* cast epoxy, 13 x 6 x 6¾", 1968

Fred Woell's spirit was born in and of the sixties. His molten slogans register, graffitti-like, upon the collective "wall" of his pins and reliefs. One reads these signs as transcribed symbols of our debased culture. His visual rhetoric bred of indignance unveils the forces of ersatz consumerism, that reside in fast food palaces and travel the interstate, that peer at us from television and billboards, that clothe our heroes, our religions and our politics, and that destroy our landscape, our cities and our souls. With wit intact, he emerges triumphant from the active engagement of its symbolism. For his goal is no longer for the cultural myth to be unmasked. The symbol itself must be shaken.



A Picaresque Tale

Back in the late 60s, when most of academia was finding a spot on the barricades, Fred Woell was in his mid-30s finding his way around Frank Gallo's studio or the sculpture department at Cranbrook.

Woell's life up to then had been a picaresque tale. After college came the perfunctory stint in the U.S. Army. Two inspirational years at the University of Illinois studying under Robert von Neumann was closely followed by an M.F.A. in art, metal and graphics from the University of Wisconsin, Madison under Arthur Vierthaler. An early rejection of the "gold standard" in jewelry, Woell's first Pop piece entitled Lincoln for President, *using his father's old wristwatch, was accepted into the 1963 annual Wisconsin Designer/Craftsmen show at the Milwaukee Art Gallery. As if to slat Woell's callous disavowl of "precious" tradition, a Scandinavian Modern silver piece was awarded the grand prize.*

Hope springs eternal. Woell ventured East, looking for a warmer reception and lured by the sweet smell of the 1965 "Art of Personal Adornment" exhibit at the Museum of Contemporary Crafts. But further rejection awaited him in New York City, as the jewelry "establishment" snubbed his Pop jewelry— a philistine gesture, an affront to his raw creativity.

Disillusioned, Woell sought the haven of rural Wisconsin, where he led a Walden-like existence, searching for the center, the Zen, John Cage's silence, trying to reconcile the rebellious attitude that was determined to create what was deemed unacceptable. Reality arrived at his doorstep in the guise of a broken-down car. Needing the cash for an overhaul, Woell was back in Illinois, seeking help from friends like von Neumann, sacking out in cheap university flats, waiting on fraternity tables and wangling his way into the fortuitous protection of Gallo's studio, where he apprenticed from 1965-67.

A Ruminant in the Round

Gallo was already established as a Pop Art sculptor noted for his satire of "cocktail culture." His signature epoxy-resin figures portrayed clinical eroticism and a penetration of contemporary anxiety. Gallo's unique sensibility was not one of ridicule but of empathy, bordering on pathos. It was in Gallo's studio that Woell found the tenor of optimism in his search for socially relevant art.

Left: *Things Go Better with Coke,* mixed media, 39 x 9 x 5"; **top:** *3¢ Washington/Lincoln,* silver pin, 1½ x 1¾" **above:** *Landscape/Salt,* silver pin on base, 1¾ x 2"

Woell's battery of ruminant heads, reliefs and fragmented torsos in cast bronze or epoxy resin appear autobiographical of the artist and his age. Emblematic of Gallo's style, they bear the pockmarks of erupting conscience, scars of anguish that stigmatize the social artist and his disenfranchized constituency. *Girl with Hairnet,* a youthful, wide-eyed, placid visage, is consternated by a mordantly encised skull—hieroglyphs that barely trace the outline of a maturing perception. Remnants of coins, buttons, chain-like patterning, tire tracks and other roadside attractions limn a portrait of a confused generation coming to grips with its imposed environment. This hairnet of symbols recalls the phrenology practiced by O.S. Fowler in the 1840s, reading character traits from the idiosyncratic formations of the skull. Fowler's reputation as a strong advocate of abolition, feminism, sex therapy, birth control, vegetarianism, temperance, shorthand and indoor toilets has been ironically clouded by his mysterious forays into cranial bumps. This same has not left Woell unscathed, as he, too irony assiduously maps the plastic surface of formative emotions—the pangs of experience, the passion, fear and elation of discovery.

The series of *Helmets with Nose Guard* are embittered insignias for this artist as noble paladin. The armor, the brilliant guards and helmets, symbolic of the artist's priviledge, shield the battered self-portrait that lies beneath. For Woell's busts are "death masks." His vanquished heros are haunted and ambivalent, bridled by latent fears of despair, resignation and defiance

that is their fate. *Pilot Head* glares out, one lens of his goggles missing, with an anxiety akin to that of the Vietnam soldier who wears his dog tags on his boots, aware that both legs are unlikely to be blown off at the same time. These chiseled, wounded faces reflect Woell's despondency and melancholy, the last vestige of the artist's spirit.

The formal properties and expressive naunces of Woell's work at this time are essentially derivative of Gallo's innovations: the creamy glow, trancelike stares, languid postures and feeling of trapped self-awareness and spiritless intelligence. For Woell, however, cast epoxy resins offered the further expressive quality of etching on surface, a property that suggests the language of the metalworker. His sculptural skin allows the graphic potential of surface and plane to map expression and character independent of the modeled mass. As evidence, *Noxin,* a play on toxin and an anagram of Nixon, is an aggressive, invidious portrait of Richard Nixon that bears an incised ship of state on its forehead as well as star-spangled teeth grinning with arrogant patriotism.

These caricatures, heads and torsos are important evolutionary works. Out of Woell's struggle to forge personal polemics emerged a confidence in the relief—the sculptural plane of the jeweler—as the milieu of his cathartic diatribes.

Fingerprints

Whether rendered as a buckle, pin or wall piece, Woell's reliefs incorporate a graphic narrative submerged beneath the surface patina. The messages form a personal syntax of perceptually deformed constellations where each element implies a mutual complicity. The calligraphic method—a fractured vocabulary of commercial lettering, advertising images, pedestrian cartoons—offers an image surrounded by a vague aura of associations. Like fossils, these molten accretions appear to emerge and recede, grow and erode until they stabilize in congealed impressions. Like bronzed baby shoes, they immortalize mnemonic objects.

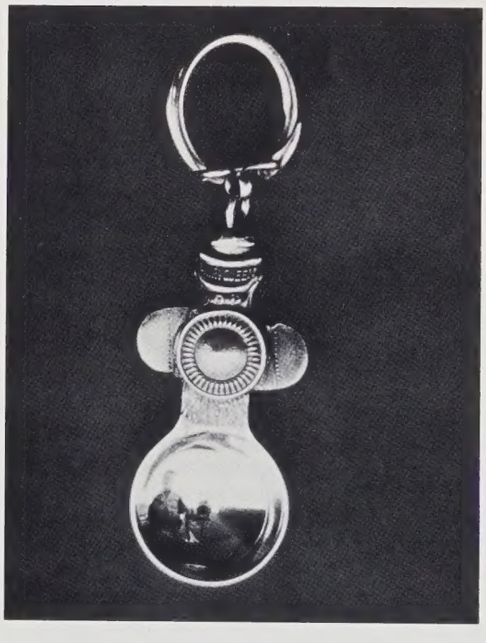
Although most of Woell's reliefs appear as satiric parodies resembling those of his Pop Art peers—compare his later *Landscape Salt* and *No Deposit,* 1969, to Jasper John's *Painted Bronze Ale Can,* 1960 or Robert Arneson's *No Deposit, No Return,* 1961—Woell eschews their need for destructive ridicule, for exalting the commercial object to icon status. Instead, he reaches for the moral tale by recycling the commonplace and distilling an optimistic ecology, where nothing is discarded and waste is rejuvenated in symbolic reuse. In *Jesus Saves Everything,* 1969, a compacted mass of crucifixes, Borax logos, coins, medals, bolts and myriad artifacts of commercial culture creates one of the most powerful images of "representable" junk, embalmed and protected as cast treasure. Woell's coded world is a readable world. His moralism requires that blatant homilies wash the surface: "Nothing is precious to man. We waste. We have little respect for anything . . . nature has been raped by our greed. Our endless orgy leaves its scar along every inch of our path . . . man is a disaster. We cannot save ourselves. So, we laugh and make fun of our plight . . . life is a joke, a bad joke."

Waste is paramount to Woell. He is a denizen of trash, a collector since childhood of things others discard. His esthetic emerges from the "junk culture" of the 60s. As described by partisan pop critic Lawrence Alloway, "Junk culture is city art. Its source is obsolescense, the throwaway materials of cities. Objects have a history, first they are brand goods, then they are possessions, accessible to a few, subjected often to intimate use and repeated use, then as waste they are scarred by use and available again. Assemblages of such material come at the spectator as bits of life, bits of environment . . . They [junk artists] attempt to transpose sociological objects of ugliness into beauty through the reformation of the esthetic experience. The formula of tangible materials, formal quality of compositions and literal meanings resonate between art and experience."[2]

Woell's journalistic "eye" moves about the cultural landscape looking for valued trash. His relief pins are snapshots, not the completed compositions of the earlier sculptures but insouciant details of a larger travelogue that entraps the viewer in the tension of the sign, between what we know and what we think we know, what we see and what we think we see. In the tradition of all good relief jewelry, they are transformed by context, as Woell confidently uses the body, the pedestal, the detachable picture frame, the intransigent wall, to reinforce the cropping of the image as an agent of the frozen message.

Throughout his reliefs, Woell utilizes a colloquial vocabulary to engage his audience. In *3¢ Washington/Lincoln,* 1969, the portraits of Lincoln and Washington appropriated from common currency are invalidated by the "3¢ deposit" extracted from the surface of a pop bottle. A text running across the top reads, backwards, "20 mule team product," complemented by the familiar Boraxo logo of "Death Valley Days." This, Woell's "coin of the realm" metaphorically mocks the most stalwart of American values, the profligacy of consumerism, the debauchery of America's Manifest Destiny, through a literal and concise juxtaposition of familiar images.

In *Brand X,* 1969, Woell takes on the Coke bottle, an American icon of another sort. Unlike Robert Rauschenberg's *Coca-Cola Plan,* 1958, and Woell's earlier *Things Go Better with Coke* (a crucifix with decimated Jesus figure, Coke cans and light-switch finial), 1969, both of which combined the actual artifacts to convey unmistakable connotations, *Brand X* through fragmentation calls our attention to the valued status of the sign that has been sublimated by the ubiquitous commodity. Woell renders the Coke icon not for its denotative meaning but for its formal semiotic impact. In *No Sex,* 1969, language is more apparent as Woell relies exclusively on the text to elevate content to a three-dimensional landscape of signs and symbols. Numbers rubber stamps, rebuses, stars—the entire printer's type case—is used to provide a cool, literal argument for an emotional subject. The detached assurance of these two pins implies the goals of advertising. Whether Coke or sex, there is no qualitative difference inherent in the sign. It is the way we use these signs that provokes controversy, criticism



Top: *Charade Parade,* silver relish spoon, 3¼ x 1 x 1⅜", 1976; **middle:** *Flight to Nirvana,* silver spoon, 5¼ x 1¼ x ½", 1984; **bottom:** *DQ to GO,* silver key ring, 3⅝ x 1 x ⅜", 1972

and ultimately establishes societal value. Woell is determined to deconstruct the language of society's value system in the hope of a more enlightened conversation.

Red Badge of Courage

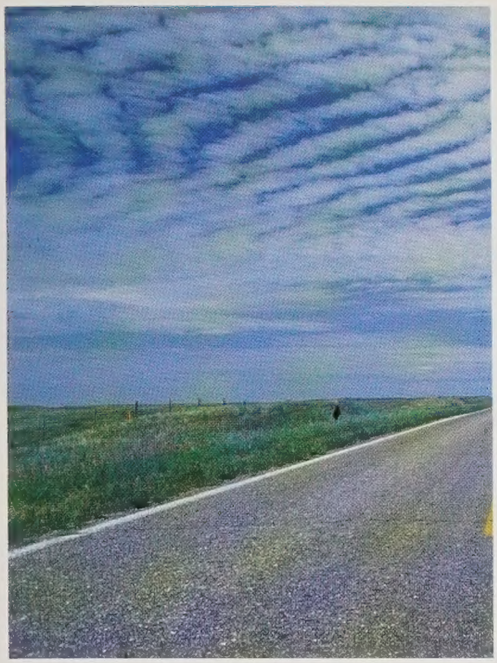
In the 1970s, while teaching at Wisconsin, Haystack and The Program in Artisanry, Woell fabricated a panoply of curious trinkets that echoed the playful dialogue of the earlier pop jewelry. To call them trinkets is not to trivialize their importance but to position them in relation to the relief and sculptural works. Whereas the reliefs and the sculptures carve the portrait of conscience, the "dispensible" jewelry confronts external conventions in the form of billboards. The dichotomy of a psychological detective probing inwardly and the mock conspirator dissassembling the vernacular outwardly coexists throughout Woell's career. Whereas the reliefs and busts elevated prosaic subject matter to contemplative soul searching, these little key chains, music boxes, pins and commemorative spoons insinuate a utility that in this case brings profundity down to a prosaic level.

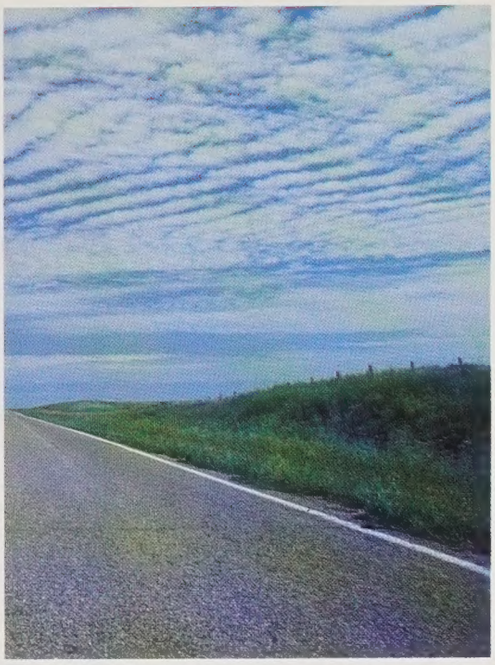
For example, Woell's *Objects to Wear* production line, an apparent consumer palliative, can be construed as a group of incisive allegories. *Sterling Flat*—"Have you ever thought about wearing a flat tire?" *Driver's Side*—"Remember when that white 1953 Mercedes coupe backed into your parked car and bashed in the door . . . Fred has cast the memory for you in brass so you can wear it and tell people that each time they ask: What's that?" *America Dines Out*—"If you eat out often at quick food establishments where the sweet smell of success is 'grease,' wear *America Dines Out*. It may cure you of the habit . ."[3]

Top: *Brand X*, silver pin, 1969; **above:** *Lincoln for President*, silver badge, 1¾ x 3", 1965, Collection: Mr. Charles Hindes, RI; **below:** *Come Alive You're in the Pepsi Generation*, copper, silver, brass, found objects and photo, 4 x 4"

Consumerism, the plunder of morality and conscience are recast in jewelry as caustic quips that "zap" authority and convention. The motif of the auto fragment, violated icon of wealthy America, the crushed fenders, the "auto bones" dangle from Woell's dime-store key chains. These pocketed fetishes secure the symbolic spoils of our insatiable acquisitiveness: the car keys, house keys, office keys . . .

This posture of humorous, commercial parody did not begin with the trinkets of the 70s nor with the earlier reliefs. They generate from Woell's first notable body of work, the 60s jewelry that has long established his reputation as jewelry's punster. But, in retrospect, these pop compositions appear time bound not only by the evolving history of modern jewelry but also by Woell's own artistic development. The miniature Heinz pickles and sundry bottle caps that have endeared him to a loyal following broke the restraints of Scandinavian minimalism and holdover 19th-century baroque ornamentation that shackled the growth of idiosyncratic exploration. The figurative imagery, the found objects, the disregard for material heritage, the raw fabrication, the colloquial content, the effortless compositions linger as contemporaneous criticism, a cleansing self-criticism that has had a profound effect upon jewelry esthetics. Nonetheless, in retrospect, after the trinkets, the pop jewelry seems to lose its efficacy. The youthful rebelliousness passes with time. Consider the heralded badge *Come Alive You're in the Pepsi Generation* 1964, where the cameo of an exuberant, stereotypical teenager, lip-synching the Pepsi jingle while bottle caps dangle like earrings beneath, is validated by





Westward Solitaire, mixed media wall relief, 28½ x 11 x 2", 1984; Photo: Fred Woell

a star, symbol of legitimacy and honor. It is a placid piece, sterile in authorial expression, trite in execution; yet for Woell it betrays the inner struggle that at the time was obsessed with social relevancy and the limits imposed by jewelry's tradition. Woell takes his place in history as jewelry's first provocateur for these daring ventures into iconoclasm, yet in his entire artistic work their relevance should remain as a temporary formative influence on the road to the reliefs and the later trinkets.

The commemorative spoons that culminate the trinket variations reach for symbols that are more resolute in personal responsibility than the Pop jewelry of the 60s. They are in the best tradition of the miniature, the legitimate contribution of the craftsman/artist, where intricacy of detail combined with the diminutive scale of narrative and symbolism forces the spectator into intimate dialogue with content.

Woell's choice of debased jewelry—spoons, key chains, music boxes—mimics trophies of consumerism with puckish sarcasm, just as his "nominal" pins ape medals and badges, awards of another kind. These trinkets mark an exploration of the confluence of sculpture's imagery with jewelry's scale and tactility. In the spoons, particularly, the bowl not only serves as a base for the formal composition but also as a reflective surface that mirrors the user, implying the necessity of function for recognition. This assemblage of totemic symbolism infers unniversal dependency on imagery to validate choices. Like a primitive talisman or idol that is meant to be held and felt in daily use, they elicit the control of American "folk" mythology: *Be Prepared, Requiem to a Luke Warm Lover, The Boy Scout Gets Old.*

Footprints

In 1984, Woell mounted his most recent show, marking the departure of the Program in Artisanry, where he teaches, from Boston University, to Swain School of Design. More mellow, more reflective, the assemblages [see cover] that Woell offered were that of a retiring sage rather than a strident activist. This is not a retirement from productivity, as the work exhibits the full range of contemporary imagery and exploratory compositions, but a retirement from social polemic. In 20 years, Woell has produced an notable body of work that through commitment has overcome the lack of exposure and critical support. Now, he has retreated into the friendly confines of his collected memories. These tranquil, pleasing assemblages, in the classic style of Kurt Schwitters, retain the longstanding fascination with found objects but without the benefit of metal's transmogrifying power. The prosaic icons stand full-scale, naked in patina and commonplace in resonance.

One of Woell's infamous slide lectures, which present his themes in an updated audio/visual format, is called "Connections." In it melodic narrative traces the concepts of fasteners, from barbed wire fences, to jewelry clasps to the people and places that have tied together Woell's personal narrative, ending with bucolic images of Maine where he lives. The serenity of the landscape signaled the repose that Woell has found in his own connections, the hamlet of thoughts and beliefs, which is where it all begins and ends. Woell, like Gallo, has found empathy with our culture. He accepts its inevitability without justification. He has internalized the struggle for reformation and has found the center. He has found the fulcrum of conscience at a time of debased ideology and commitment, for politics needs to migrate into autonomous art and nowhere more so than where it seems politically dead.

Michael Dunas writes on art, craft and design.

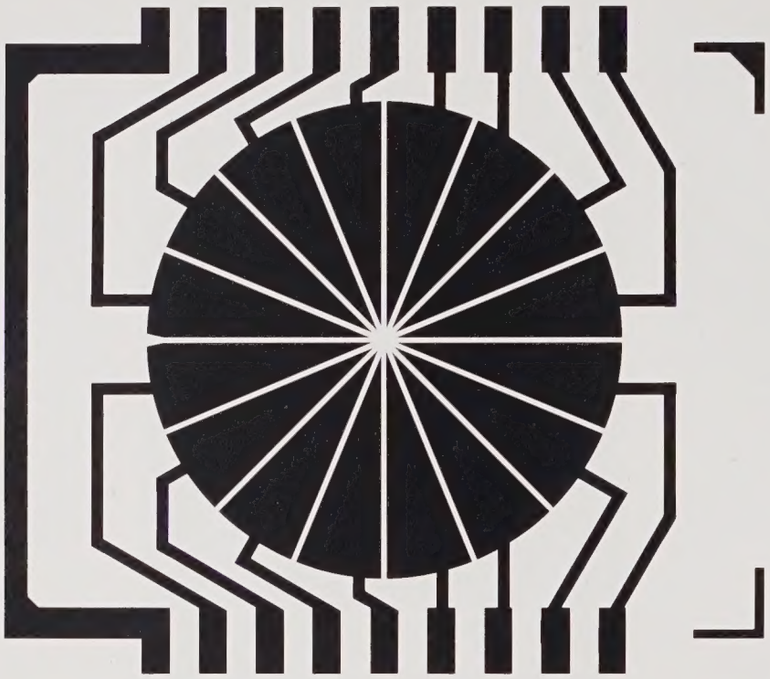
Notes

1. *The Eccentric,* Birmingham, MI, November 5, 1970, p. 15B.
2. William C. Seitz, *The Art of Assemblage,* New York: Museum of Modern Art, 1961, p. 73.
3. Text from Woell's "Objects to Wear" mail-order brochure.

DATA WORSHIP

CYBERNETIC JEWELRY: A SYSTEMS APPROACH

by Vernon Reed



Front plane electrode pattern for 16-segment disk LCD

We live in an age of rapid technological progress where the unthinkable becomes possible and the impossible becomes routine. Even so, the fields of metalsmithing and jewelry making have been slow to incorporate advanced technologies. I believe that microelectronics and computers provide a natural (r)evolutionary path for jewelry development in the late 20th century. The first steps down that path have been taken, and I hope this paper will help others travel it as well.

The word cybernetic refers to the study of human control functions and of electronic systems designed to replace them, i.e., computers. Cybernetic jewelry, as I define it, denotes a type of electronic jewelry controlled by a software program running on a programmable computer lodged in the jewelry piece itself. This is in contrast with classical electronic jewelry, which has no such software component.

Here I intend to place cybernetic jewelry within a cultural and historical framework, showing how it relates to jewelry making and computer art, as well as to society as a whole. Rather than an isolated aberration, it is a natural and inevitable product of our contemporary civilization. I will describe the unique nature of cybernetic jewelry by comparing and contrasting it with "normal" and electronic jewelry forms and by illustrating some of the revolutionary potentials inherent in the concept.

Many metalsmiths and jewelers may find this subject rather esoteric and difficult. I will present a divide-and-conquer strategy that allows you to attack problems in sub-units and then integrate those solutions to achieve higher levels of complexity. This "systems approach" involves analyzing cybernetic jewelry in terms of nested subsystems. It requires that one obtain only enough knowledge and equipment to work at the appropriate level of complexity. Finally, I shall present examples of implementations of this technology and offer some conjectures about future developments.

I make no claim that this is an exhaustive treatment of the subject; cybernetic jewelry is too complex to so treat in a paper in this size. What I will present is an overview of the basic concepts involved and a useful introduction to the new methodologies required. Persons interested can use the information here as a basis for their own explorations of the art-and-technology interface.

A Rationale For Cybernetic Jewelry

The metals/jewelry field has historically benefitted from the infusion of new materials and working technologies from outside its purview. Outstanding and familiar examples are Arline Fisch's adaptation of textile technology and Stanley Lechtzin and Daniella Kerner's use of computer-controlled machining, vapor deposition and electroforming techniques. Tools and materials define ideas, and new tools can define new ideas.

Throughout history, artists have used the most advanced tools and methods of their times to create works of lasting beauty and import. Certainly, granulation must have been at the cutting edge of the Etruscan technological horizon, and the Renaissance painters were among the first to embrace scientific perspective. This desire to "expand the envelope of "esthetic expression is deep-seated and is part of the drive to explore new frontiers, whether in space or in cultural evolution.

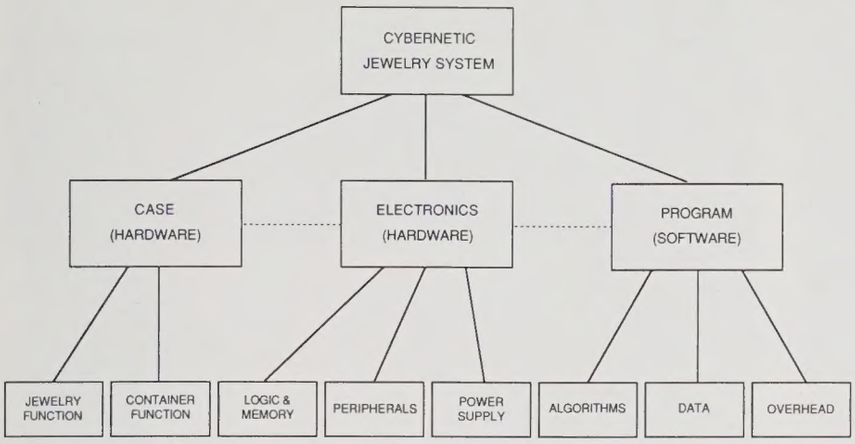
Jewelry, like other art forms, is an embodiment and reflection of the culture we live in. We are moving toward a technology-based, information-oriented society, in which data is the most important product. Rapid change is axiomatic, and we are evolving new esthetic sensibilities to help integrate this flood of experiences.

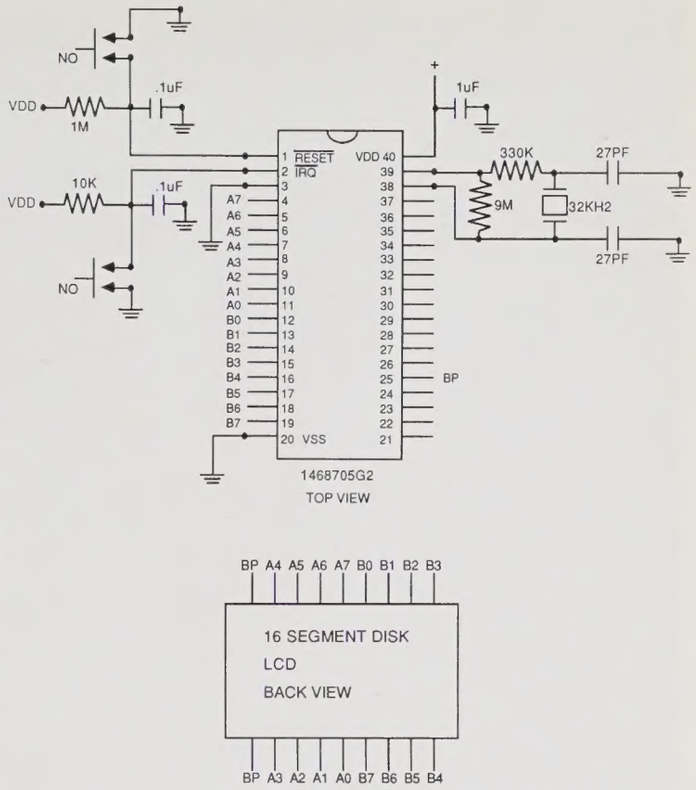
The TV generation has grown up accustomed to an avalanche of images and to the interconnectedness of events and places; the MTV generation is growing up accustomed to multi-channel input and to the equivalence of sight and sound. Our attention is simultaneously being attenuated in span and broadened in band width, creating an ability and a need to acquire more information in a shorter time. At least some people creating conceptually serious jewelry need to develop an esthetic that addresses these issues. I believe that cybernetic and, to a lesser degree, electronic jewelry provide the foundation for such an esthetic. If we can say that sculpture has provided the paradigm for art jewelry as currently constituted, then video provides the paradigm for this jewelry for the information age.

At first glance, computer graphics technology would seem an unlikely basis for a new jewelry esthetic, but on closer examination, most objections are of a technical nature. There is no fundamental problem, except that until recently it has been impossible. Recent developments in hardware have made it feasible to place limited, but still interesting, computer graphics systems into wearable jewelry pieces. The challenge is to develop the potential of these systems.

Viewing the problem from the computer side of this issue, we can see a similar convergence. Computer art has grown tremendously since the early days when it was limited to plotter outputs and Cibachrome prints of video screen images. Now computer-mediated art runs the entire spectrum from super-real film and video images to robotlike sculptures and rooms that react to their occupants. Current miniaturization and low-power technologies make it possible to apply these same ideas in the unique environment afforded by wearable systems.

Computer art has some qualities that are unique or amplified due to the nature of the medium. We tend to think of of computer output of any kind as having a high degree of logical structure. While this is definitely true in many or most instances, computers can also produce a degree of randomness and dis-





Above left: *Systems Tree* showing how cybernetic jewelry systems can be analyzed in terms of nested subsystems; **above right:** schematic diagram of MCU module with 16-segment LCD and 1468705G2 microcomputer

order difficult for human neurons to match. Interactivity with the environment is another forte of computer art, as in instantaneous mutability of image. These qualities provide the raw material from which to fashion a new cybernetic jewelry esthetic.

To don the jeweler's hat once more, jewelers and metalsmiths are, by their nature and training, accustomed to the kind of fanatical attention to detail required to develop computer hardware and software. I believe the gulf between these two worlds is not nearly so wide as appearances would indicate. I would like to propose a bridge to join them.

Definition Of Cybernetic Jewelry

Since preshistory, it has been possible to characterize virtually all jewelry in terms of hardware. This hardware has taken a tremendous number of forms, from seashells strung on grass to diamonds set in platinum. We have seen jewelry made in every metal imaginable, as well as cast plastic, folded paper, ivory, slate and wood. Lately, we have seen electronic jewels made of integrated circuits, powered by batteries and driving liquid crystal displays and light-emitting diodes.

All jewelry has one thing in common. The esthetic entity is defined by configurations of hardware. Changing the visual aspect of that entity requires reconfiguring that hardware in some way. This reconfiguration can involve substitution of materials, rearrangement of parts, alteration of surface texture, etc. In the case of electronic jewelry, radical change can be effected by something as simple as pushing a switch to a different position, but this is nevertheless an alteration of hardware, namely the rearrangement of parts.

Recent developments in microcomputer technology allow for a radical new possibility: cybernetic, or software-intensive, jewelry. In this scheme, a significant part of the esthetic entity is defined by a software program running on the jewel's internal microcomputer and output to an appropriate display device.

When we view a computer-generated video image, the esthetic entity which we respond to is not the video monitor on which the image appears or even the computer connected to the monitor. Instead, the esthetic entity is a software program, i.e., a logical arrangement of numbers circulating through the computer's circuitry and instructing it to perform specific functions. The performance of these functions results in the video image. The hardware serves only as a matrix or substrate to contain the software; any monitor will work for output and, within certain constraints, any computer will do for running the software. It is the logical sequence of numbers, the software, which is the unique determinant of the perceived esthetic entity; a different set of numerical instructions would produce a different image.

If we take this concept and change the context from video installation to wearable art, then we arrive at the concept of cybernetic jewelry. Cybernetic jewels all contain programmable computers on which the software runs and some kind of output device that changes its configuration in accordance with the logical structure of the software. I use liquid crystal displays (LCDs) as output devices, although there are other alternatives.

The primary feature distinguishing cybernetic jewelry from all other jewelry forms is the software component. Total identification of the jewel with the software would require a jewelry system capable of displaying images of near-video resolution; I call this idealized goal "monitor esthetics." The hardware in such a case would serve an essentially functional role of fastening the computer system to the body and would otherwise be as visually neutral as the video monitor in the example above. However, reality lags behind potential. Although it is theoretically possible with current technology to generate video-quality images in a jewelry system, it would be extremely expensive and difficult. The visual output that can be achieved with my system is of a more modest nature, but the basic principles are still the same.

If we consider the esthetic that comprises the jewel to be determined, at least to some degree, by software rather than hardware considerations, then such a jewelry piece can assume some radical revolutionary properties. Most obviously, if a software program is determining how a jewel appears, then the appearance of that jewel can be altered by loading a different program into the jewel's computer memory, without changing the hardware aspect in any way. Alternatively, if the software is written in a modular form, it is possible to achieve totally different effects by directing the computer to execute at different locations in memory. I have used this strategm in my first generation of cybernetic jewels. The interactive nature of computer technology makes it fairly simple to use data input from external sources, such as switches, keyboards or sensors, to modify the execution of the program, and thus the visual appearance of the jewel. Visual output in such a system could be determined by brain waves and barometric pressure, for instance, combining to alter program execution.

Thus, we see that the application of computer graphics technology to electronic jewelry systems allows a unique redefinition of what constitutes the jewel. This new definition points the way to an information-age jewelry esthetic, where software becomes the primary medium.

The first precursors of information-age jewelry began to appear about 15 years ago, when advances in semiconductor techonology allowed the placement of electronic circuits in jewelry objects. These electronic jewels were, and are, just as hardware-bound as other jewelry forms, but they had some significant differences as well. Most important, they

Above left and right: Vernon Reed, *Cyberscape Zero,* cybernetic neckpiece, titanium, acrylic, rubber, microcomputer, LCD, DSKTRN3 software, 4½ x 3½ x ½", 1985. These photos represent different time intervals of the read-out to demonstrate the dynamic nature of this "jewel"

allowed jewelry artists to work in the time dimension as well as the three dimensions of space. Electronic technology made it relatively easy to create jewels that presented a constantly changing face to the world. Another radical potential of this new technology was the ability to use external inputs to alter the manner in which the jewel was changing. Mary Ann Scherr's bioresponsive jewels are prominent examples of the way in which electronics opened the door to new possibilities for the jewelry artist.

My initiation to electronics came in 1974, when I became convinced that computer-generated video was a logical path for jewelry evolution. The necessary microcomputer and LCD video technology did not exist at that time, so I had to be content creating animated LCD graphics generated by hardware circuits. Even at this crude level, the ability to deal with moving and changing images was a challenging and fascinating experience.

The benefits of technology do not come without a price. The entire electronics industry is predicated on the economy of scale, on the amortization of development costs over very large production runs. This is completely antithetical to the notion of the lone artist producing unique artifacts, so conflict must inevitably arise when these two value systems collide.

One very tangible way in which this issue affects electronic jewelry is in the matter of component size and parts count. When making electronic or cybernetic jewelry, one needs to generate electronic signals of a very specific nature to control the output device. The generation of these electronic signals is performed by tiny electronic components called integrated circuits, or chips. In making normal electronic jewelry, the nature of the signal is determined by the kinds of chips chosen and the way they are interconnected. This is often referred to as "hard-wired logic." Problems arise because, depending on the complexity, a number of discrete chips may be needed to produce the desired signal.

Although we think of these chips as being quite small, which they are, they come in bulky packages for the purpose of simplified connections. The limited amount of space available in a jewelry object makes it difficult to employ a large number of these packaged chips.

There are a couple of solutions to this difficulty. Both are rather expensive for an artist interested in producting unique pieces. It is possible, though often difficult, to obtain the required integrated circuits in their raw, unpackaged form, but it requires very specialized equipment to handle and interconnect them. Such work must be performed under high magnification using ultrasonic wire bonding techniques. The other solution is to have the desired circuit placed on a custom or semi-custom chip by an outside contractor. This method results in the smallest, most elegant solution, but also the most expensive; the first chip supplied might cost $2,500 to $50,000, depending on complexity and the technology chosen. Additional chips might cost $5 per piece in 10,000 quantities. Both of these methods result in one circuit design, hard-wired to perform one function. Unless the artist plans to duplicate this circuit in many jewelry pieces, it is not likely to be worth the effort or money invested. There are severe economic, as well as technological, constraints on the amount of complexity that can be incorporated into classical electronic jewelry.

Cybernetic jewelry provides a way of sidestepping this issue. The microcomputer, which lies at the heart of every cybernetic jewel, is a tremendously sophisticated integrated circuit. Without using additional circuitry, it is capable of generating complex patterns in an LCD panel. Unfortunately, the microcomputer itself comes in a rather bulky package, but at least it requires no additional chips. The big payoff comes when you wish to produce a different kind of output signal. Instead of designing a new circuit made of a number of individual chips, you need only write a new program and load it into the computer's memory. The hardware need not change.

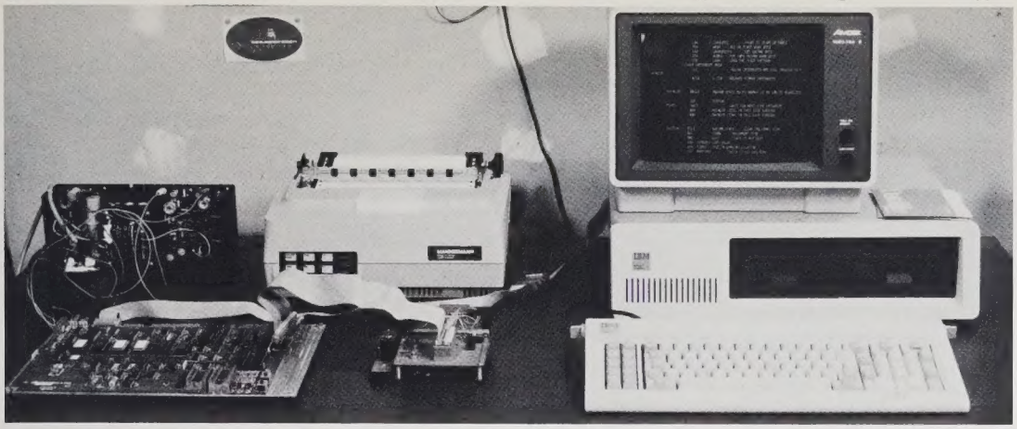
Electronic jewelry is different from "normal" jewelry and cybernetic jewelry is different from electronic jewelry. New methodologies are needed to manage the high degree of complexity involved. I am presenting a method that will allow even those without "high-tech" backgrounds (like myself) to produce technologically sophisticated artworks, given a sufficient amount of dedication and persistence.

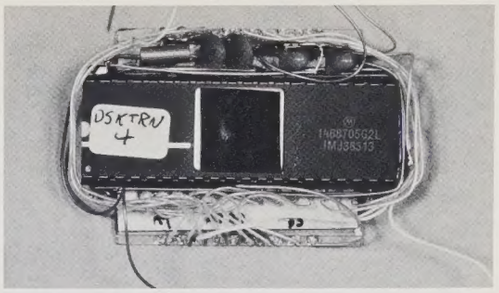
A Systems Approach

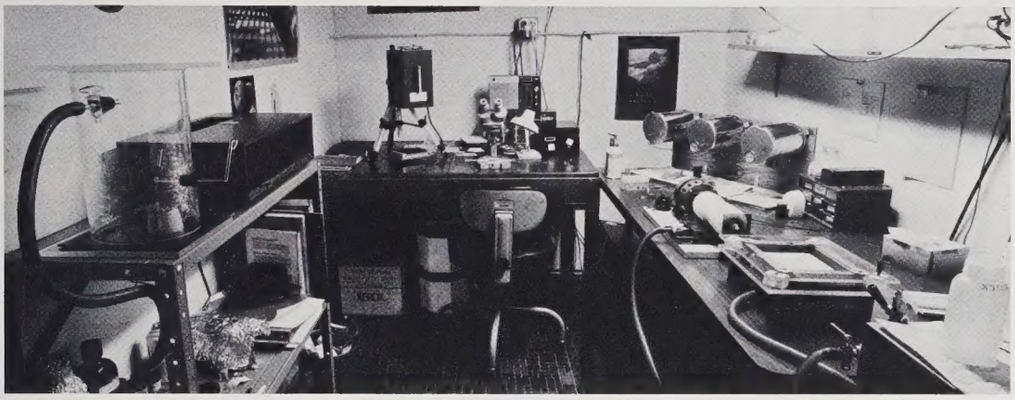
The essence of this method is to analyze cybernetic jewelry systems in terms of nested subsystems and to identify the tools and techniques required to operate at each subsystem's level of complexity. Solutions achieved at each subsystem level are integrated and used as a base for attacking higher levels of complexity, until the desired outcome has been realized. It is a learn-as-you-go approach and does not assume a lot of prior knowledge on the artist's part. It does demand a willingness to deal with the false starts and failures inherent in any bootsrap situation.

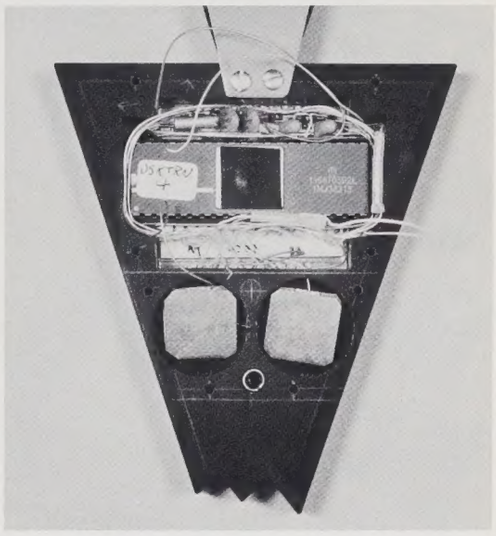
There are two very important considerations that differentiate cybernetic jewelry making from more traditional metal/jewelry work: It requires some very specialized equipment and a detailed knowledge of seemingly arcane subjects. It can be expensive in time and/or money to acquire the machines and knowledge required.

The various ways of dealing with this expense fall into a continuum. One extreme involves acquiring a great deal of money and









Top left: *Cybernetic jewelry studio* (left to right) power supply for EVM/emulator, EVM/emulator, printer, test jig, IBM compatible personal computer; **top right:** *MCU module,* 1468705G2 single-chip microcomputer wired to LCD, DSKTRN4 program; **above right:** Inside a cybernetic jewel, showing how cavities are cut in acrylic sheet; the two large round holes are for batteries; **above left:** *"Clean room" for LCD fabrication* (left to right) vacuum-fill chamber, electrostatic air filter, mercury lamp, ovens, molecular alignment buffer, precision screen printer

then subcontracting all aspects beyond overall design management. The other extreme assumes that the artist will spend time and energy to acquire all expertise and equipment required. These two poles correspond roughly to the standard industrial approach and to the approach more often employed by artists. For the purpose of this paper, I will assume that most people will operate somewhere between these extremes, probably closer to the do-it-yourself pole.

I have arrived at a policy regarding equipment. Use someone else's if feasible (and often it is not); failing this, build it yourself (also sometimes impractical); as a last resort, buy it. Fortunately, computers cost only a fraction of their previous price.

In regard to specialized knowledge, I find that it is necessary, at the very least, to know enough to be able to intelligently discuss your ideas with experts in the technologies you plan to use. In my experience, if you are truly committed and dedicated, the people who know what you need will be there when you look for them, but it is important to meet them at least part way, rather than treating them as some kind of "black box" knowledge device. Middle-level engineers working in industry are often excited to find artists using these technologies in novel ways. They will frequently go out of their way to assist you. Sometimes I get help out of friendship, sometimes I trade jewelry and sometimes I have to hire engineers, which can become very expensive.

There are many ways to acquire the minimum level of knowledge required to implement technology-intensive projects. One way is to take courses in a college or trade school, possibly by correspondence. Another way involves using self-teaching materials in a nonstructured situation. The method I have used, which results in an incomplete, but serviceable, understanding is simple. Start working, read everything available (often three or four times) and talk to anyone who will respond. Of course, it is desirable to have knowledge beyond this minimal level, but if willing assistants can be found, it might be better to think in project management terms.

All cybernetic jewelry systems are made up of three main subsystems, two implemented in hardware and one in software; these can be further divided into simpler subsystems. There are tools and techniques necessary for operating at each level.

Conclusion

Most jewelry artists will ask, "Is it worth the hassle?" The answer is personal, depending on several factors of which the most important is whether the artist takes seriously the notion of technology transforming culture. And, so, does he or she believe that art can play an important role in a technology-oriented society.

Many artists might have an aversion to using computers. The truth is, I am not so crazy about computers myself. However, I hope that the "systems approach" I have presented will show how that issue can be managed. The same technologies that have literally taken us to new worlds can also point the way to new worlds of esthetic expression. The sky is no longer the limit. Go for it!

This paper was first presented at the 1986 Society of North American Goldsmith's conference. For a complete text, which includes a detailed method for analyzing the many complexities involved in creating cybernetic jewelry, send a check or money order for $7.50 to Bob Mitchell, SNAG, 9421 Hunting Court, Charlotte, NC 28105

Acknowledgments

Thanks to all the engineers and scientists who have opened their minds and their labs to me, especially Howard Johnson and Dan Evanicky, without whose help and tutelage I could not have done it.

Vernon Reed is an artist and jewelry designer living in Austin, TX.

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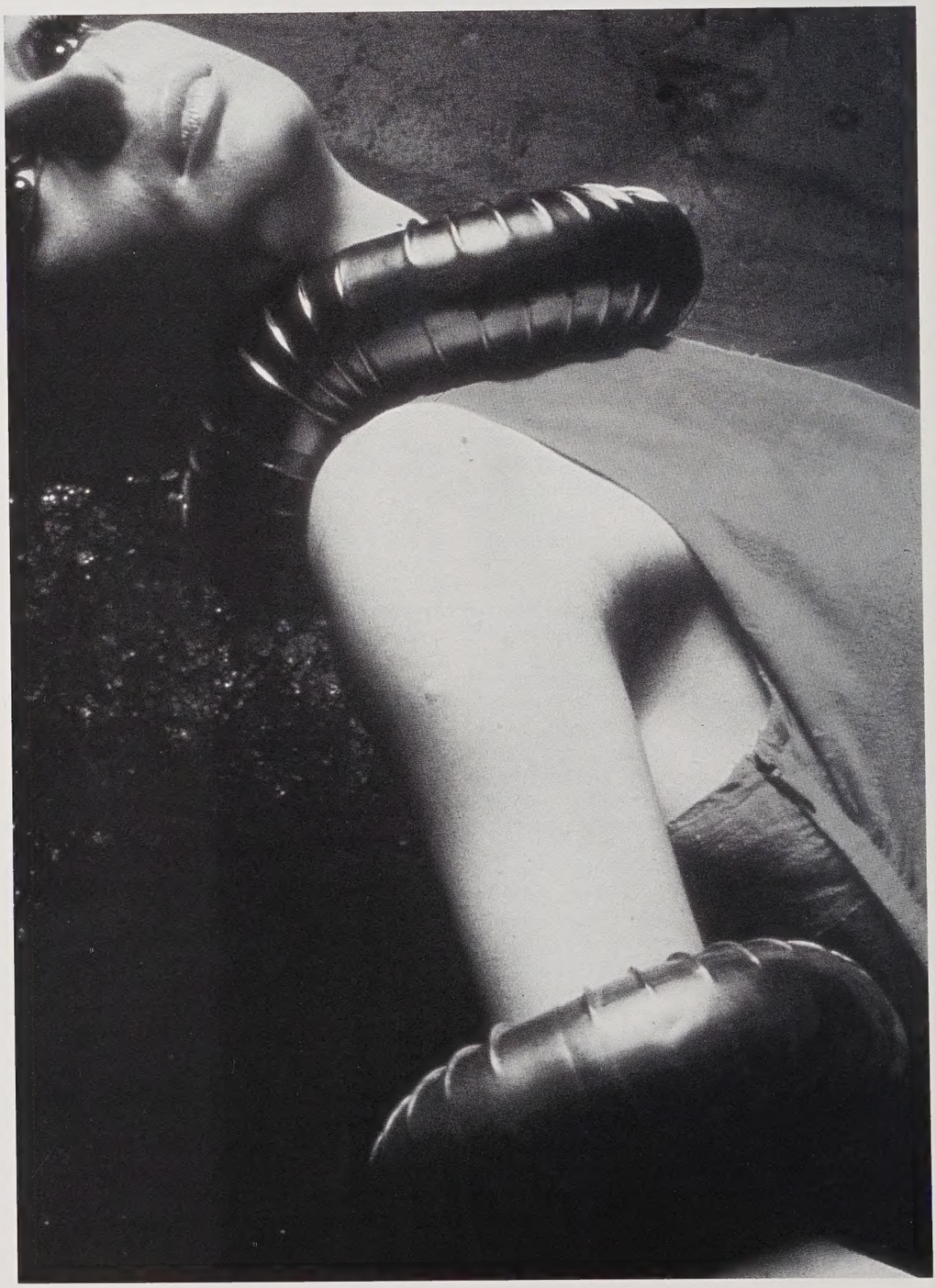
Rah, Rah . . . RA Gijs Boom Bakker

by Liesbeth den Besten



Paul Derrez's Galerie RA in Amsterdam has been for the past 10 years a major conduit for experimental jewelry, of which Gijs Bakker is a leading proponent. This article both examine's Bakker's pioneering work and traces the history of Galerie RA as a vehicle for bringing this work to a large public.

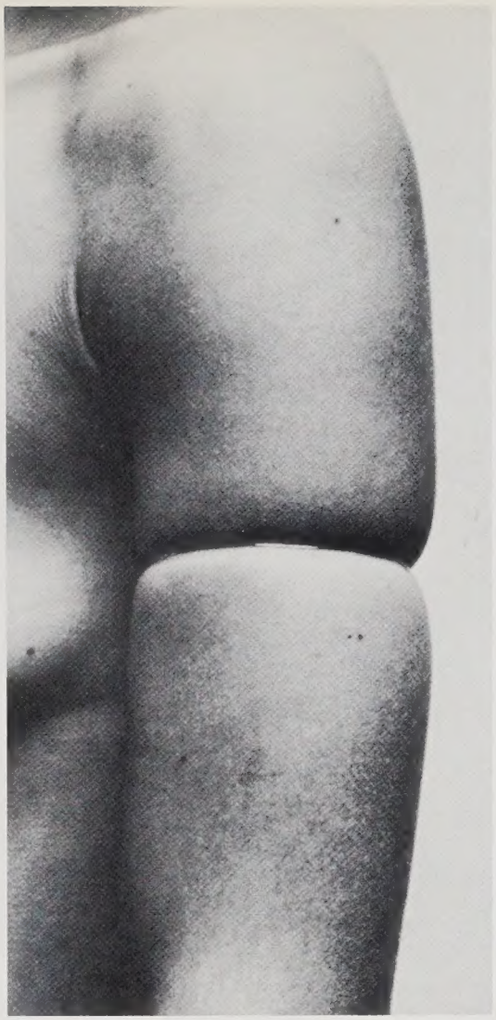
Since the late 60s, Gijs Bakker (b. 1942) has been influential to both Dutch and international jewelry design. His work, often humorous and ironic, rarely decorative, poses the seminal questions: Why do people wear jewelry? What does jewelry do to people? What is the jeweler's role in this process?

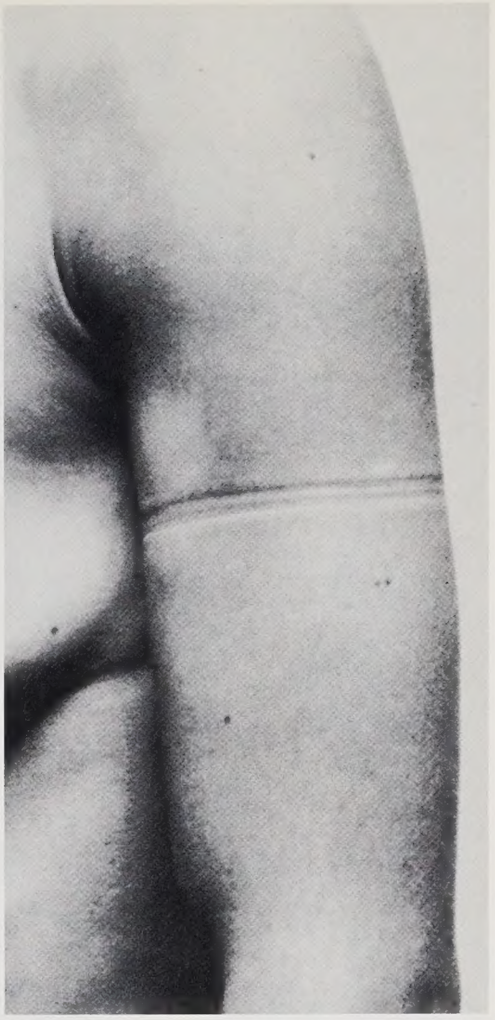
Bakker trained as a jeweler from 1958 to 1962 at the former Instituut voor Kunstnijverheidsonderwijs, now the Gerrit Rietveld Academy, in Amsterdam. He then studied at the Konstfack Skolan in Stockholm, Sweden, for a year, where he first encountered industrial design. Back in Holland, he worked for several years as a designer at the silversmiths Van Kempen & Begeer. Inspired by the industrial techniques he had learned, in 1966 he designed a spot-welded stainless steel bracelet. In terms of material choice and technique, this was a sensational piece, that was to mark a significant turning point in the development of modern Dutch jewelry design.

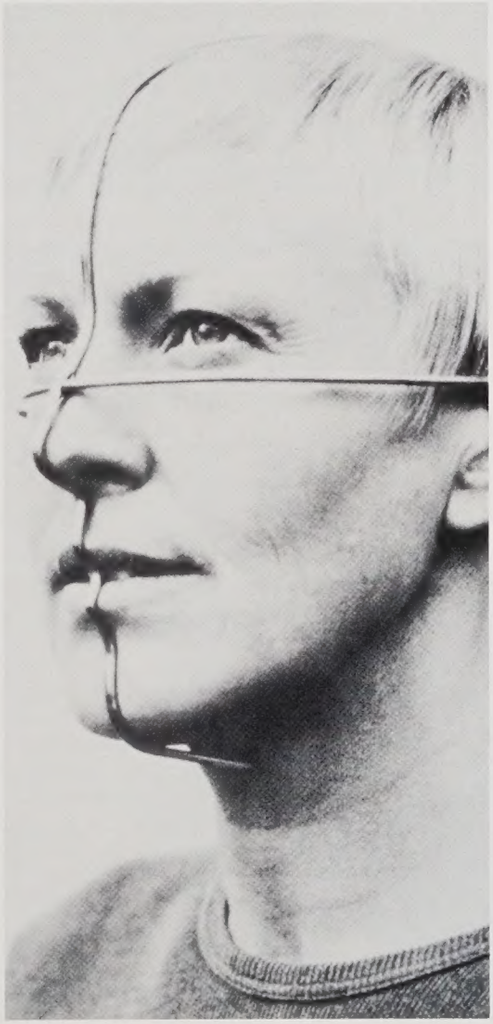
In 1965 Bakker married Emmy van Leersum (1930 - 1984), a fellow-student at the Academy. That year, they held their first exhibition at Galerie Swart in Amsterdam, which coincided with the exhibition of geometric abstract reliefs by the Dutch artist Ad Dekkers. Dekkers's work greatly impressed Emmy and Gijs. In it they recognized their goal: not craftsmanship but sublimation of form. The Documenta in Kassel and other exhibitions in their own country of contemporary Dutch and international art, such as Minimalism and Geometric Abstraction, stimulated Bakker and van Leersum to proceed further in the direction of a study of form, based on geometric and systematic principles. In this period, their work was characterized by the desire to eliminate the subordinate function of jewelry as decoration, by increasing its scale and forming a new relationship between jewelry and clothing. They created large metal collars which were related to dresses and trouser suits, also of their own design.

They rebelled against the traditions of the craft and wanted to free jewelry from its historical ballast. They strove to achieve industrial manufacture of their pieces to introduce the multiple in jewelry-making. Although production was never achieved, they made use of certain industrial techniques such as welding, cutting, polishing and anodizing aluminum. The materials they used were industrial ones: aluminum, stainless steel and plastics. By means of minimal modifications to the material (cutting, folding and bending) sober pieces were created, in no respect reminiscent of the traditional craft of the jeweler. Emmy van Leersum described their method as "attaining a maximum, using minimal means."

Around 1970 Gijs Bakker created a series of bracelets based on the proportions of a standard aluminum tube. These bracelets often take the circle as their basic form, a corner being introduced by bend-

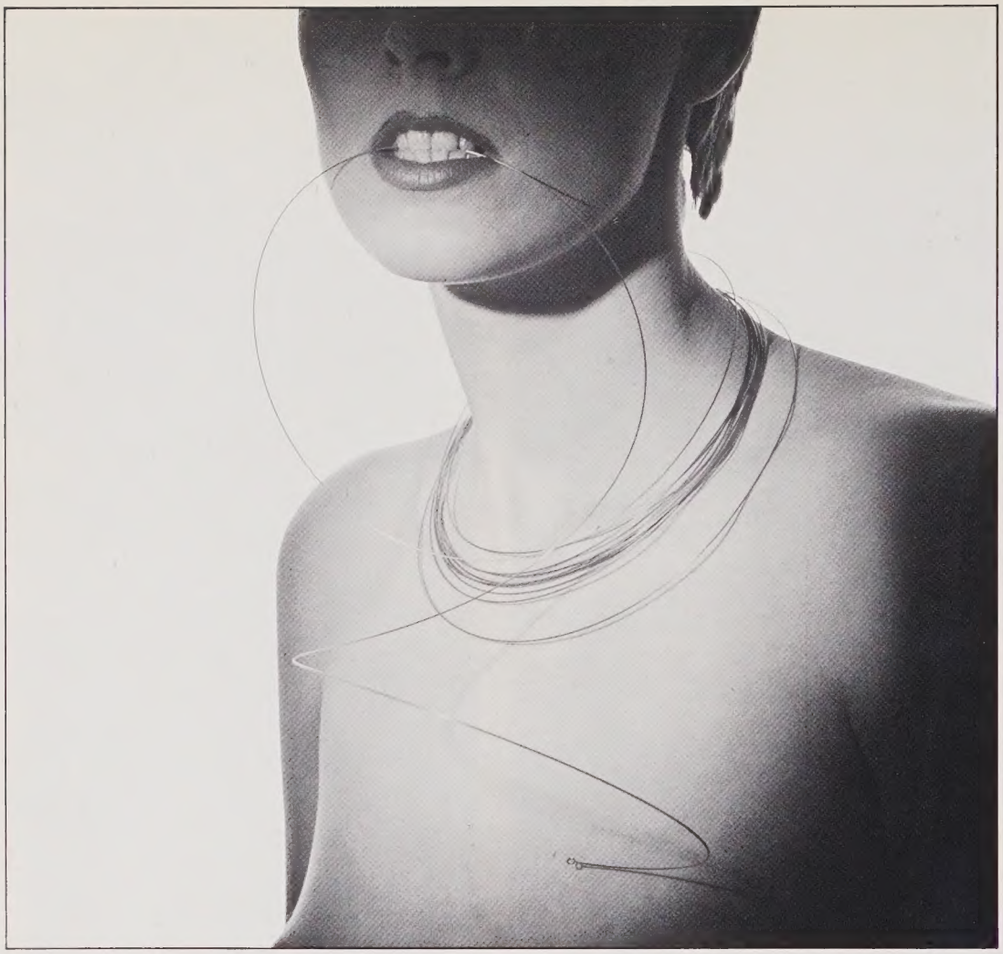






Opposite top: *Shoulder Piece,* aluminum, 1967. Photo: Matthijs Schrofer; **left:** Gijs Bakker, *Collar* and *Bracelet* made from anodized aluminum stovepipe, 1967

Top left and right: Gijs Bakker, *Shadow jewelry and invisible jewelry,* wire, gold, 1973; **left:** *Steel profile wire* (model: Emmy van Leersum), 1974; **right:** *Steel profile. circle,* (model: Fritz Maierhofer), 1974



ing the material. Commenting on this type of jewelry, Bakker remarked: "I am not saying that it is a bracelet. Yes, you can wear it on your arm, but people buy it because they agree with it, not because it is a comfortable bracelet." This pure, geometric resolution derived from Bakker's earlier (1967) production pieces—a collar and bracelet, based on stove-pipe forms. Starting from the problem of how a piece of piping can be modeled round a neck or arm by pleating, he discovered the potential of stove-pipe as elementary jewelry. There is a definite connection with Minimal Art in Gijs Bakker's approach towards an industrial product as salable jewelry. He succeeds in using production jewelry as a vehicle for his ideas about his profession. These pieces represent a synthesis of the study of form and his critical approach towards contemporary jewelry esthetics. Bakker and van Leersum's large, sober aluminum collars, which isolate the head from the body, and the tube bracelets, produced in series, together with the stove-pipe jewelry can be interpreted as a statement of the new spirit that had taken hold of jewelry design in Holland: against the cult of status and costliness and for industrial and mass culture developments.

Mentioning the names of Gijs Bakker and Emmy van Leersum in one breath is only valid for the first 10 years of their activity as jewelers. Until the time of her death, Emmy van Leersum remained involved in the consequential study of form in relation to the body. For Gijs Bakker, the study of form, with its inherent codes and rules, was to prove restrictive and dissatisfying. His critical approach to the profession resulted in the creation of jewelry in which concept is more important than function. Bakker, as it were, uses the theme "jewelry" as the focus of his investigations.

In 1973 Bakker designed the so-called "organic" pieces, which marked an advanced dematerialization of jewelry. With the aid of photographs he showed the impression of a gold-wire which had been tightly bound around arm, leg or waist for a short period. He strove to transfer the accent from the jewel itself to the body. These pieces are literally 'molded to the body': jewelry which, through a minor modification, brings about a startling transformation in the body itself. Bakker's comments on the jeweler's craft are ironic: he used gold at a time when it was practically taboo for the majority of young Dutch jewelers, as a goldsmith he formed not the gold but the body and, finally, the gold wire was kept in a signed, green velvet case.

Other pieces such as the steel wire profile of Emmy and the disc profile of his Austrian colleague Fritz Maierhofer, dating from 1974, represented a reaction to the serial bracelets he had previously made. In his opinion bracelets had become too independent in form and application, while profiles were personal, non-interchangeable pieces, forming a discrete relationship with an individual.

Bakker consequently questions the motives of both jeweler and public alike, through jewelry with an ironic character. On this subject he has said the following: "It has to be more for me. For me it remains the peg on which I can visually hang my story". The decorative function of jewelry

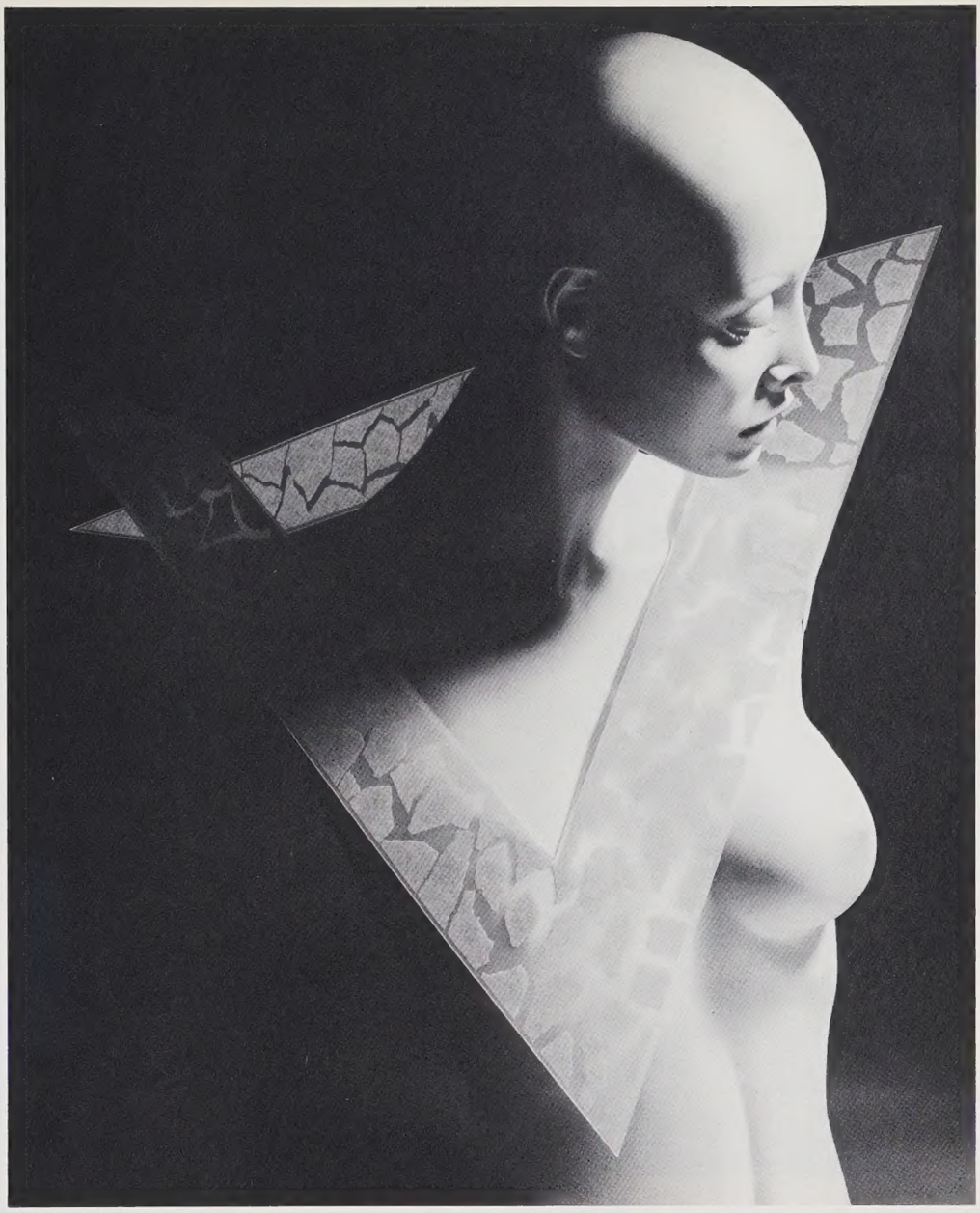
frequently reappears in his work as a sort of caricature of the concept "to decorate." This is illustrated by the 5 meter necklace of gold wire (1977) and by the series of necklaces entitled *Queens* (1977), in which he mocks status jewelry. It also appears in the necklace *Dew-drop* (1982), a large laminated photograph of a red rose with dew drops, with its allusion to the hackneyed romance of beauty and eternal love, and the necklace *Embracement* (1982), in which a photograph of the artist's arms surrounds the wearer's head. Bakker explained the latter two pieces as follows: "I see that, despite all the developments of recent years in the area of jewelry and wearability, people still have traditional tastes and that the traditional concept of what a piece of jewelry should be—simply decorative—is still very much present. Well, if people are so in favor of romance, I will let them have it. The *Embracement* and *Dew drop* are illustrations of the concept 'to decorate,' taken quite literally." (In Dutch "to decorate" also has the meaning "to court.")

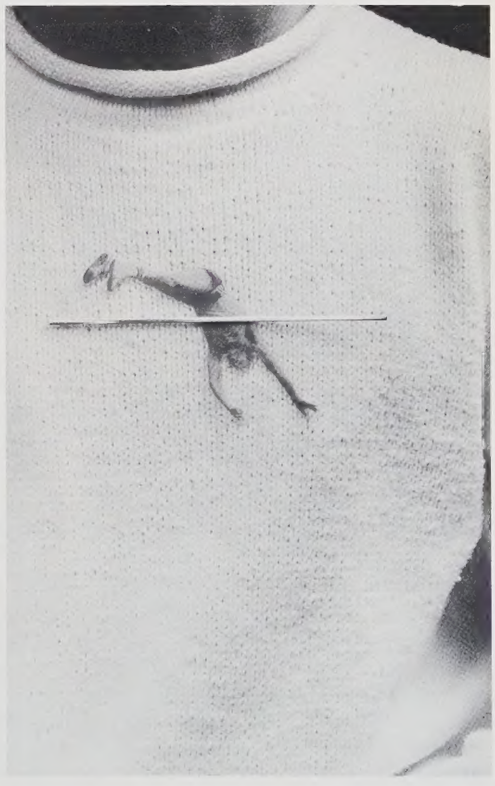
The main techniques which Bakker has employed since the *Queens* series is lamination: a fragile material (paper, photograph, flower petals, gold leaf) is sealed between two thin layers of transparant plastic. His most recent jewelry consists of necklaces that add figurative imagery to his advanced study of form. The necklaces are geometric. Materials such as tissue paper, silken thread, newspaper and gold-leaf are treated by means of a minor change, such as being torn or folded into pleats, and then laminated in plastic.

These maintain Bakker's signature irony. The necklace *Pforzheim 1780* is a laminated photograph of a baroque jewel. Here we see a piece that takes the convention of the jewel and the jeweler's craft as its subjects. The figurative brooches represent popular images (sport figures) taken from newspaper photographs and combined with contrasting material elements such as gold and precious stones. The use of these costly materials - and the combined technique of the settings is stimulating in the light of contemporary developments. Old values appear reinstated. The circle seems closed. Or is this Bakker's comment on the recent development in Dutch jewelry design, the return to craftsmanship at the cost of experiment?

Liesbeth den Besten is a Dutch art historian.

Since 1972, Gijs Bakker has also worked as an industrial designer on furniture, lighting and glassware. He teaches in the Metal and Plastics Department of the College of Art at Arnhem and lectures both in Holland and abroad. His second American tour takes place in the fall of 1986. From 1966, Bakker has participated in numerous international group exhibitions. He was one of the contributors to the exhibition "Objects to Wear by Five Dutch Jewellery Designers, "which toured the United States in 1971. He has also held many solo exhibitions, including one in the spring of 1986 at the Helen Drutt Gallery in Philadelphia.





Opposite top: Gijs Bakker, *5-metre necklace*, gold wire, 1977; **left:** *Embracement necklace*, black/white photograph laminated in plastic, 1982. Photos: Jos Fielmich

Top: Gijs Bakker, *Triangle necklace*, torn paper laminated in plastic, 1986; **above left:** *Sport Figure brooch*, newspaper laminated in plastic, precious stone, 1986; **above right:** *Sport Figure brooch*, newspaper laminated in plastic, gold, 1986

Galerie RA Rah, Rah, Rah . . .

by Joke van Ommen

In October 1986, Amsterdam's Galerie RA will mark its tenth anniversary in the forefront of Europe's experimental jewelry movement. To celebrate the occasion, founder-director Paul Derrez has invited the 80 or so artists who have been associated with his gallery to create a special piece for a jubilee exhibition. The anticipated result will be not only a testament to Derrez's legacy but also a survey of experimental jewelry design today.

In the mid-60s, new social and political ideas swept across Europe. In Holland, the vanguard of jewelry designers such as Emmy van Leersum, Gijs Bakker and Francoise van den Bosch, reacted against the concept of jewelry as an ornate display of wealth and status. Their work was minimal, geometric and made of nonprecious materials such as aluminum and stainless steel.

Galerie Sieraad, opened in Amsterdam in 1969 by Lous Martin and Hans Appenzeller, became the first showcase for this new jewelry. It featured new designs made in small editions (five to 50 pieces), which could be sold at prices the general public could afford. After completing his education as a jewelry designer, Paul Derrez worked at Sieraad, gaining invaluable experience.

By the time Galerie Sieraad closed its doors in 1974, a new generation of Dutch jewelers had finished its education, and the severe, minimal designs of the first group gave way to a burgeoning of new ideas. To provide an outlet for this surge of creativity, Derrez established Galerie RA in 1976 in the basement of the 17th-century house where he lived.

The second half of the 1970s was a lively period for new ideas in jewelry. It was a time of great creativity and experimentation with wearables of every shape and dimension. Emphasis on cheap materials prevailed. Experiment with precious materials was financially impossible, of course, but the choice of inexpensive, "anti-establishment" materials was principally a reaction against the traditional role of jewelry. Gold was "out" in Holland; garden hose, knitting needles, magnifying glasses and other everyday objects were transformed into simple but often witty jewelry.

From the start, Derrez's goals were threefold:

1. Monthly exhibitions introducing new designers or developments. These solo or theme shows provided an important catalyst for a growing cadre of jewelers.

2. A "permanent collection" where the work of gallery artists codified the contemporary diversity of styles and design concepts.

3. An "information center," a collection of written materials—catalogs, articles, resumés, etc. Unfortunately, very little was written about the young jewelry movement (a situation that still prevails), but whatever Derrez could

find was made available to the public.

A gallery depends on the work that is currently produced to set the style and direction of the day, but since Galerie RA was the only game in town, it was able to stimulate trends and confer legitimacy. Noteworthy in this respect was the emphasis Derrez gave to body adornment made by artists in other disciplines, especially fiber. He organized important exhibitions of work by such artists as Mecky van den Brink, Beppe Kessler, Lam de Wolf and Kai Chan.

Derrez resisted the trend among art jewelers towards unique pieces which are expensive and which, like traditional fine jewelry, are accessible only to the elite. He favored "democratization of good design" by means of multiples, the use of inexpensive materials and simplicity of construction. The image of his gallery today, with its emphasis on lower prices, was largely formed by this belief in popularization.

Over the years, Galerie RA's international contacts have grown, especially with artists working in Germany and England. Exhibitions by foreign artists, including Otto Künzli, Johanna Hess-Dahm, Esther Knobel, Caroline Broadhead, Julia Manheim and Pierre Degan, enlivened the scene in Holland. More recently, there has been sporadic contact with the United States: work by Majorie Schick and Robin Quigley has been shown at the gallery, and Derrez spoke at the 1985 Society of North American Goldsmith's Conference in Toronto.

Critical acclaim, however, does not guarantee financial success, and it was not until 1983 that Derrez was able to move Galerie RA from his cramped basement to a larger, modern space in a good, visible location. The move has made the gallery more accessible to the general public and has expanded its clientele. The gallery's functions have remained unchanged—monthly exhibitions, a "permanent collection" and an information certer—but the whole operation has become larger and more professional. The monthly show announcements have grown into the "RA Bulletin," newsletter in poster format, with information about forthcoming events, available catalogs and other gallery news in both Dutch and English. From a small "cult" gallery for insiders Galerie RA has become an international mecca.

Today, Galerie RA is no longer the only contemporary jewelry gallery in Holland; many have opened all over the country, often modeled on RA's example. Responding to the diversity in jewelry design, a trend towards specialization has appeared among galleries as well.

Ironically, with all this activity, the general feeling of optimism and enthusiasm for the "cause" of experimental jewelry is faltering among artists. They find themselves racing to keep up with demands of galleries and preparing for exhibitions, so busy producing pieces that they have no time to pursue new ideas and develop new designs. Despite the success of their work, many are still living in near-poverty—a state they may have found acceptable some years ago as young single people but frustrating today as 40-year-olds with family responsibilities. To solve this problem some artists opt for one-of-a-kind, expensive work, shown exclusively in solo exhibitions, while others concentrate on a better organized production line.

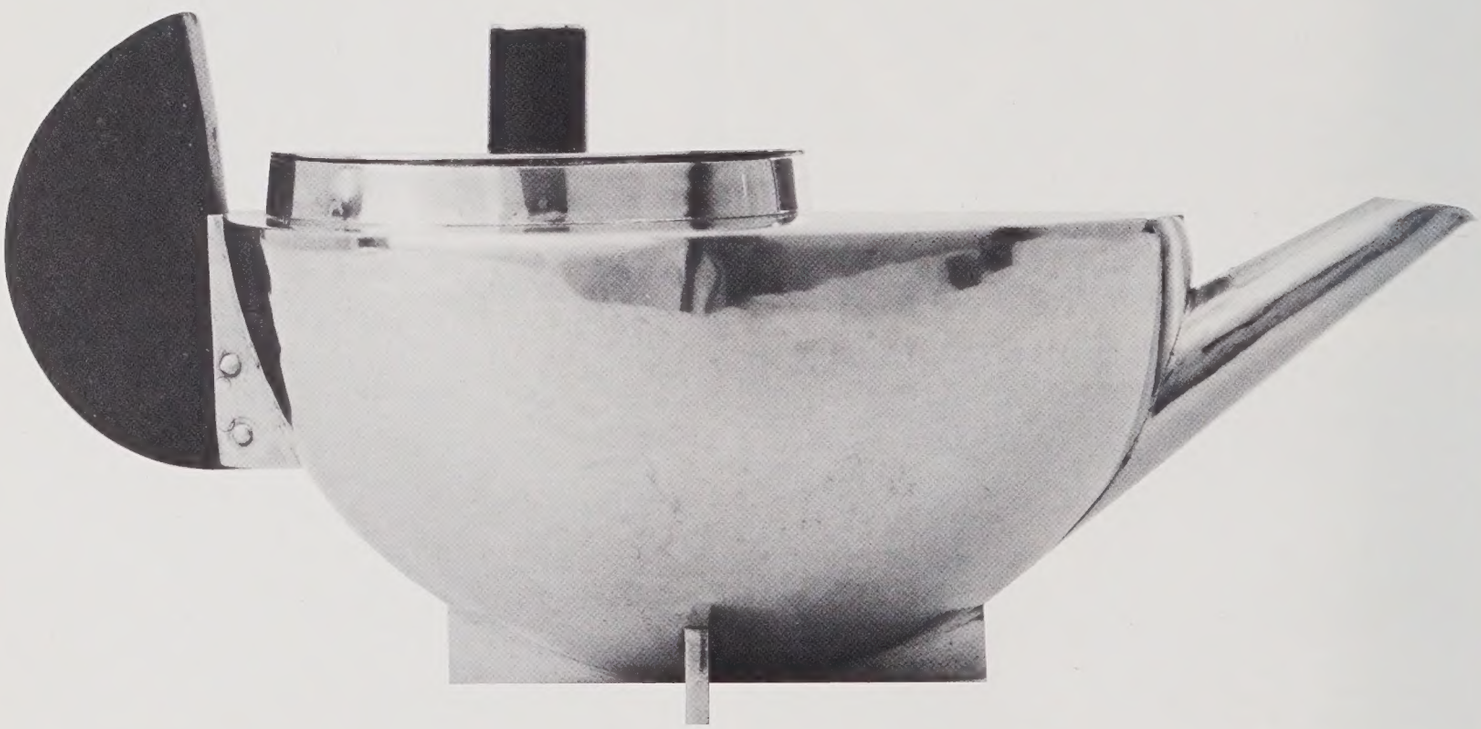
In contrast to this situation, Galerie RA's jubilee exhibition will be a welcome international event. The new work created by some 80 jewelry innovators will offer a stimulating alternative for both artists and general public alike. It is hoped that it will influence the future of jewelry design as well as the future of Galerie RA. Knowing of Paul Derrez's enthusiasm and commitment, one looks forward to his next 10 years with eager curiosity.

Joke van Ommen is a jeweler who also owns VO Galerie in Washington, D.C., which, together with Spektrum in Munich and V & V Galerie in Vienna, specializes in international experimental jewelry.

Opposite page, top: Paul Derrez with box and bottle, cork, silver, 1986; **bottom:** Claudie Berbée with arm piece, textile, 1986; **above:** Richard Walraven with brooch/necklace, aluminum, gold, 1986; **right:** Marion Herbst with bowl, wood, 1986. Photos: Anna Beeke

In this article Deborah Norton traces the rise and fall of this seminal 20th-century school. Although Bauhaus policy revolved around personalities and philosophies, it nonetheless embarked on an influential experiment of incorporating the principles of art with the economies and practicalities of design.

THE BAUHAUS METAL WORKSHOP: 1919-1927



When architect Walter Gropius founded the Bauhaus in 1919, he hoped to revitalize design by uniting the innovative vision of the fine artist with the technical ability of the craftworker. In formulating his ideas, he was influenced by famous workshop precedents, including that of William Morris, leader of the British Arts and Crafts Movement, and the Deutscher Werkbund.

In 1907, the Deutscher Werkbund was founded in Munich, a society of manufacturers, architects and craftsmen dedicated to raising standards of designs for industry. Gropius, a member of the Werkbund, in explaining the need for artists to become involved with industry wrote, "An object of even technical perfection must be imbued with spiritual content and with form so that it becomes outstanding in the multitude of similar objects."[1]

Following World War I Gropius was appointed head of a newly combined art academy and arts and crafts school in Weimar which he renamed Staaliche Bauhaus. This new post gave him the opportunity to put his ideas into effect. In the Founding Manifesto, using medieval references worthy of a disciple of William Morris, he wrote: "Let us create a new guild of craftsmen, without the class distinctions which raise an arrogant barrier between craftsman and artist."[2] He planned to unite all the creative arts under the primacy of architecture. He envisioned a team of men (and surely women, as one-third of the students were female) who would work independently, although in close cooperation, to further a common cause, as craftsmen in medieval times worked together to build cathedrals.[3] To Gropius, architecture was the culmination of all the

by Deborah Norton

crafts, so it followed that architects must undergo craft training before they could begin to design buildings. He told students: "All great works of art in past ages sprang from absolute mastery of the crafts."[4]

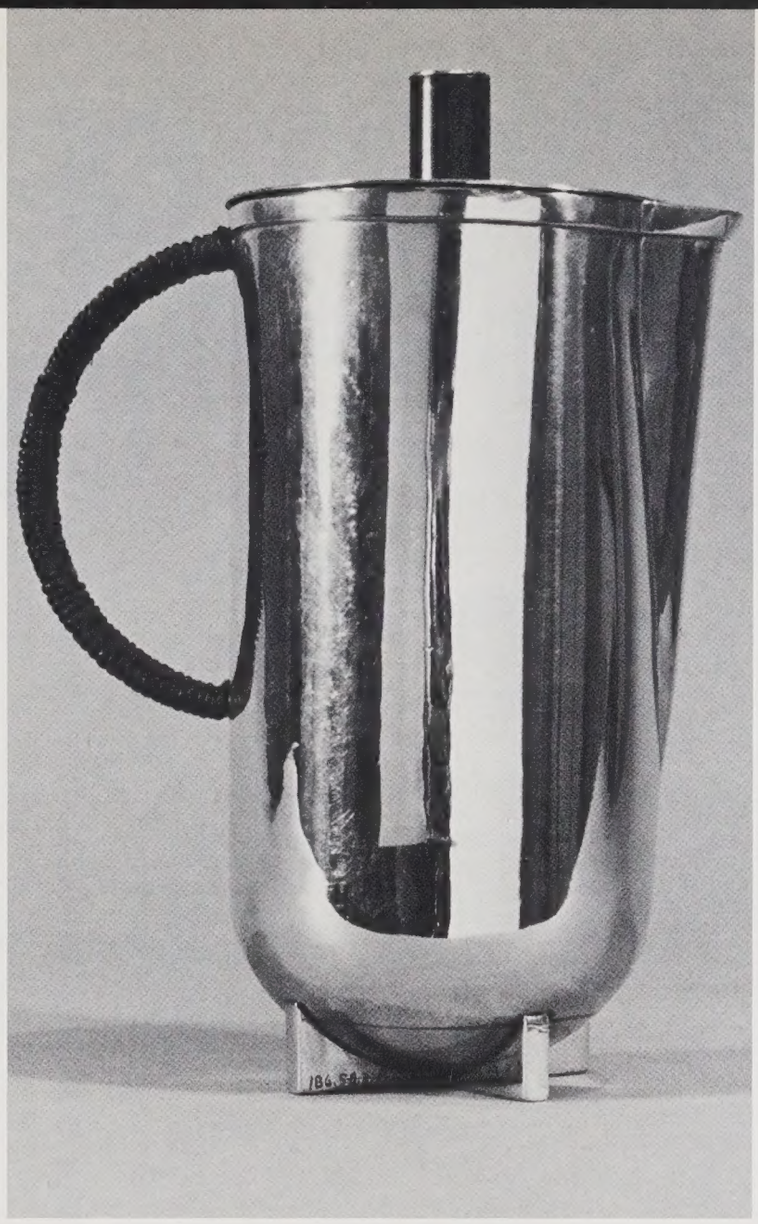
At the Bauhaus, curriculum was devised that would eliminate what Gropius saw as the two gravest faults of traditional art academies—slavish copying of historic styles and dependence on individualistic personal taste. All students took an initial six-month preliminary course, followed by a three-year training program in a craft workshop. Only after completion of the workshop training would a student be qualified to take the architectural course, which was not formally taught at the Bauhaus until several years later.

Because of the previous separation between art and crafts, Gropius found it necessary to hire two masters for each workshop, a technician to teach craftsmanship and a fine artist to teach form. As he explained, "The sensibility of the artist must be combined with the knowledge of the technician to create new forms in architecture and design."[5]

Although idealistic philosophies and new approaches to art education played a significant role at the Bauhaus, it was the faculty that enabled the school to make such a unique and lasting contribution to 20th-century design by bringing together some of the most creative individuals of the time—men like Johannes Itten, Lyonel Feininger, Oskar Schlemmer, Paul Klee, Vassily Kandinsky, Lazlo Moholy-Nagy, Josef Albers, Marcel Breuer and Ludwig Miles van der Rohe.

One of the first hired, Itten, a fine artist teaching in Vienna, developed and taught the preliminary course and was appointed form master of the ill-equipped metal workshop. Itten believed that art should be the expression of personal vision and emotion communicated through geometric forms. To Itten, these forms were historically and conceptually primary in the creation of art.

The early products of Itten's metal shop (1919-21) were direct extensions of the explorations of geometric forms from his preliminary course. Spheres, cubes, cylinders and cones—or segments of them—became the basis for objects. Contrast, also stressed in the preliminary course, was achieved by juxtaposing opposite forms, such as circles next to squares. Ornamentation, always geometric, played an important role in these early pieces, giving personal expression to otherwise austere shapes. A container by



Lipovec made in 1921 is typical of this period. Here the lid of a rectangular box is surmounted by the top half of a sphere. Surface ornamentation takes the form of circles applied in horizontal, parallel lines.

Metalwork produced after 1921 showed a change in style. At this time there was a general tendency in modern art to move away from an emphasis on overall compositional rhythms to a greater concern with the articulation of individual forms.[6] This change is apparent in the work of Itten and his students. Pieces from this period are constructed element by element in an architectonic manner. In one anonymous teapot a truncated cone serves as the foot, with a sphere for the body and another cone for the lid. A whimsically shaped handle is the only ornamentation.

Finding a qualified craft master to complement the form master at the metalshop proved to be a problem. The first two hired, Willy Schabbon and Alfred Kopka, lasted only a short time. It was not until Christian Dell was hired in 1922 that this workshop was able to achieve some stability. Unfortunately, little is known about Dell, for despite Gropius's efforts to break down the barriers between artists and craftsmen, historians have written volumes about form masters while largely ignoring the craft masters. It is known that Dell was an experienced silversmith and a gifted teacher.[7] Prior to the War he was at the Wiener Werkstatte in Vienna, producing holloware in an avant-garde, geometric style. At the Bauhaus Dell's work, devoid of decoration, concentrated on the innovative use of geometric forms. Coincidental with his arrival, surface ornamentation in the metal shop was abandoned. Historian Hans Wingler gives Dell little credit for this or any other change, stating: "The efforts to arrive at uncompromisingly new forms emanated from the artists, both teachers and students; the master craftsman, coming from a different to them.[8]

Towards the end of 1922 Gropius adopted a new slogan, "art and technology, the new unity" which signaled a change in the Bauhaus focus.

Although the slogan was new it was consistent with ideas Gropius had espoused while a member of the Deutscher Werkbund. Perhaps he had sidelined these ideas in the early Bauhaus years in favor of teaching hand craftsmanship because he felt that only when the latter was mastered would a student be capable of creating high-quality industrial designs. It is unlikely tht he ever envisioned hand craftsmanship as an end in itself.

Efforts would now be devoted to designing for industry. Not all the masters felt comfortable with this new direction. Itten's ideal of creating individual objects imbued with personal expression could not be reconciled with designing for machines and he resigned.

To replace Itten, Gropius hired Laszlo Moholy-Nagy. As Moholy had no experience in designing for industry, initially he could only encourage innovative work that extended Dell's teachings.[9] Moholy brought with him a belief in Constructivist philosophy, which emanated from the Russian avant-garde and Dutch De Stijl movements. The stress on formal precision, objectivity and rationalism would eventually prove to be highly compatible with machine production. Although this philosophy was in direct opposition to Itten's belief in self-expression, Moholy's commitment to geometric forms was as intense as his predecessor's. Years after the Bauhaus closed, a design by a former student that used a non-geometric curve, elicited this response from Moholy: "Wagenfeld, how can you betray the Bauhaus like this? We have fought for simple, basic shapes, cylinder, cube, cone and there you are making soft forms—which is dead against everything we have always been after."[10]

As an artist Moholy was interested in exploring spatial design, which he defined as the "interweaving of shapes: shapes which are ordered into certain well defined, if invisible space relationships; shapes which represent the fluctuating play of tension and forces.[11] He was also concerned with balance and weight displacement. These concepts appear in his students'

Opposite: Marianne Brandt, *Teapot*, silver, ebony, 3 x 8", 1924. Courtesy British Museum; **above:** Marianne Brandt, *Hot Water Jug, nickel silver, ebony, rafka wrapping*, 6⅞ h., 1924. Collection: The Museum of Modern Art, NY. Phyllis B. Lambert Fund

holloware, which share certain characteristics. Their geometric forms create profile that clearly define the space they occupy; each element is conceived as a distinct part, yet the relationship of one to the next is equally important; and contrasting shapes and materials create tensions that are resolved by close attention to proportion and balance. Whether Dell shared Moholy's concerns and equally influenced the students is impossible to say.

In a particularly fine German silver coffepot by Wilhelm Wagenfeld made in 1923-24, a spherical body is placed on a small cylindrical foot. This same cylindrical shape reappears as the neck and is topped by a hemisphere for the lid. A strong profile, contrasting forms and balance achieved by centering the weight makes this piece typical of holloware produced under Moholy and Dell.

In the same time period student Marianne Brandt made a small teapot that also uses a sphere for the body. But unlike Wagenfeld's piece, where the circular shape is truncated at the foot and lid, her pot retains the pure sphere. However, this necessitated a unique solution for the appendages. The lid is made from an oblique slice cut out of the top of the sphere. The foot is composed of two thick strips of silver crossed at right angles, with the spherical shape of the body cut into the tops of the strips so the pot can nest securely without visually interrupting the sphere. The flat half disc that is the handle contrasts with the rest of the piece. Brandt also made a series of teapots using the bottom half of a sphere as the body. The lid is a thick disc placed towards the edge of the flat top surface. Although this seems to shift the weight off-center, Brandt's fine sense of proportion ensures that the pot maintains a visual balance. Contrast is heightened by combining various materials; she often used bronze for the body and lid, and silver for the foot, spout and handle mount. The handle itself was ebony. It is noteworthy that in all these handmade Bauhaus pots the

Top: Christian Dell, *Coffee and Tea Service,* silver, wood, 1925. Courtesy Victoria & Albert Museum; **above, left:** Wilhelm Wagenfeld and Karl J. Jucker, *Table Lamp,* glass, chrome-plated metal, 17" h., 1923-24. Collection: The Museum of Modern Art, NY. Gift of Philip C. Johnson. Currently being reproduced by The London Lighting Company, 135 Fulham Rd., SW 3; **right:** Marianne Brandt, *Ashtrays,* brass, nickel-plated metal, 2⅝" h. Collection: The Museum of Modern Art, NY

precision of the rigid geometric forms could have been machine produced.

Functionalism, a fundamental tenet of the Bauhaus, was also of importance to Moholy. Brandt has stated that everything was tested before it left the workshop—teapots had to be well balanced, pour properly and not drip.[12] Yet, surprisingly, the solutions for handles, while visually exciting, were often functionally dubious. The small, solid ebony handles on Brandt's teapots seem difficult to grip. Several students' use of a sweeping arc, made of a flat piece of metal imaginatively combined with a right angle, appears, functionally, awkward. The same can be said of a gravy pitcher by Wagenfeld that was designed to be gripped by two small wooden stubs emerging from opposite sides.

Although no actual designing for industry occurred during Moholy's first years at the Bauhaus, he encouraged students to experiment with handmade designs that might serve as prototypes for machine production. Because in his own art Moholy was obsessed with light, the metal workshop students turned to designing light fixtures. To Moholy there was no esthetic difference between a fine lamp and a fine kinetic light sculpture, for they were both conceived as carriers of light.[13] The students' first attempts, although failures, were nonetheless a significant step toward uniting art and industry. Moholy has said, "I remember the first lighting fixture by K. Jucker . . . with devices for pushing and pulling heavy strips and rods of iron and brass, looking more like a dinosaur than a functional object. But even that was a great victory for it meant a new beginning."[14]

Inspired by Moholy's abstractions in glass and metal, Wagenfeld and Jucker designed a table lamp in 1924. Moholy and Gropius, impressed by the prototype, decided that a series of lamps should be made for exhibition at the Leipzig Fair. So, in a primitive workshop, with only one ancient polishing machine, the metalsmiths set to work. Unfortunately, the results proved unsuccessful. Wagenfeld wrote, "Retailers and manufacturers laughed at our efforts. These designs which looked as though they could be made inexpensively by machine techniques, were, in fact, extremely costly craft designs." Years later Wagenfeld realized that his lamp was a "crippled, bloodless picture in glass and metal."[15] Ironically, this same lamp design is being produced today by an English manufacturer.

In 1925 the Bauhaus was forced to relocate in Dessau for

BAUHAUS JEWELRY AT THE BAUHAUS

From 1919-23 the Bauhaus also had a jewelry workshop run as a private enterprise by Naum Slutzky. He was one of the only teachers at the Bauhaus at this time that was both an artist and a technician. Born in Kiev in 1894, he had learned goldsmithing at an early age from his father who had trained with Fabergé. He later studied fine art with Itten in Vienna and in addition received a degree in egineering from the Vienna Polytechnic. Gropius met him while Slutzky was working at the Weiner Werkstatte. Impressed by the similarity of their ideas, Gropius hired him to establish a jewelry studio as well as to assist in the metalshop, despite the fact that Slutzky was only 21. Years later Gropius wrote, "Mr. Slutzky was not only a technical master but also creative and experimental in his approach to metalwork. From the most basic element he could achieve great innovative effects."

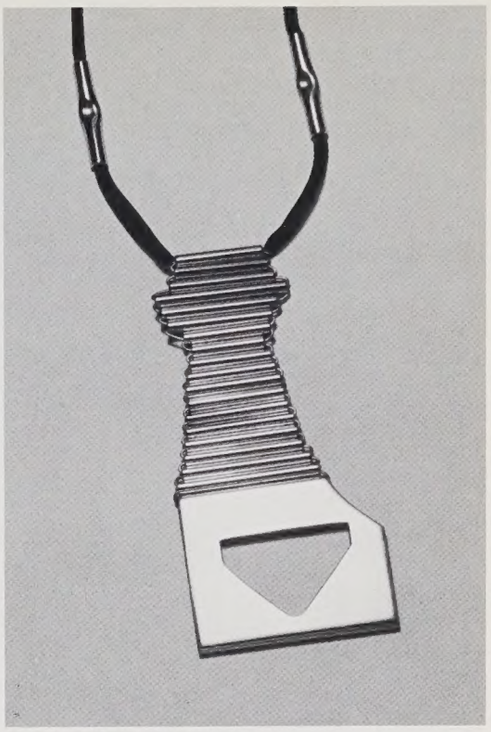
In his jewelry Slutzky favored geometric shapes, especially concentric circles, yet without the machinelike precision that characterized later Bauhaus work. He combined diverse materials, often incorporating wood and ivory as well as semiprecious stones into his designs. His bold pieces, obviously influenced by Expressionism, may also have been inspired by German folk art which was quite influential in the early years of the Bauhaus, especially in the ceramics workshop.[13] Folk art's pure and direct use of basic forms and decorative motifs was a way of avoiding historical styles and the arbitrariness of personal taste.[14] Although he was intrigued with the idea of making production jewelry Slutzky never had the business sense to coordinate the effort, and thus all his work was one-of-a-kind.

Slutzky left with the 1922 change toward art and technology, but most likely for personal, rather than philosophical reasons, as it is known that he had a personality conflict with Itten's replacement. In any case his resignation permanently terminated the jewelry workshop.

—DN

All information here comes from a conversation with Mrs. Naum Slutzky in London, December 6, 1985. The Gropius quote is from a letter dated May 29, 1934 in Mrs. Slutzky's possession.

This year Edition Teunen was authorized by the Bauhaus Archives in Berlin and Mrs. Slutzky to replicate a necklace and ring by Naum Slutzky, each in an edition of 50. The replicas were made by hand by a German goldsmith. For more information, see *Art Aurea*, 3/86, pp. 62 & 93.



Center: Naum Slutzky, *Ring*, 1931-32; **top & below:** *Two Necklaces*, 1931-32. Courtesy Museum für Kunst und Gewerbe

political reasons. This move gave Gropius the opportunity he needed to reorganize the school in order to fully implement his idea of uniting "art and technology." He asked Moholy to convert the metal workshop into a laboratory dedicated to the research and production of prototypes for industry. At first, many of the students objected. Moholy later recalled, "Changing the policy of this workshop involved a revolution, for in their pride the goldsmiths and silversmiths avoided the use of ferrous metals, nickel and chromium plating and abhorred the idea of making models for electrical appliances or lighting fixtures."[16] But eventually, probably as a result of Moholy's strong personality and his genuine commitment to the new goal, the students adjusted. Brandt commented on this transitional period: "At the time I was convinced that an object had to be functional and beautiful because of its materials. But I later came to the conclusion that the artist provides the final effect."[17]

Top: Wilhelm Wagenfeld, *Gravy Boat with Plate,* silver, ebony, 16 cm h., 1923-24. Courtesy Badisches Landes Museum Karlsruhe Bildarchiv; **above:** Marianne Brandt, *Ashtrays,* stainless steel, 3½ x 2½", 1926, reissued by Alessi, 1985

The preliminary course was maintained, but the system of dual masters was abolished as there were now Bauhaus graduates who could teach both craft and form. At this point Dell left. Whether this was because his services were no longer needed now that each workshop had only one master, or for other reasons, is unknown.

In Dessau function truly became the prime concern of the Bauhaus. Whereas before it was felt that the form must prove to be functional, now it was declared that the function must dictate the form. Despite the changes, the role of the fine artists remained as important as ever. Gropius felt that although function was dependent on science and technology, only artists could teach form.[18] To Moholy the distinctions between art, craft, design and technology were irrelevant in the industrial age. "The criterion should not be 'art' or 'not art'," he said, "but whether the right form was given to the stated function."[19]

In the new, well-equipped metal shop in Dessau light fix-

tures became the main focus, although some holloware production continued. The students' efforts were quickly rewarded. According to Moholy, "During those days there was so conspicuous a lack of simple and functional objects for daily use that even the young apprentices were able to produce models for industrial production which industry bought."[20] The German lighting industry established links with the Bauhaus that proved invaluable to both. As Brandt recalled, "Gradually, through visits to the industry and inspections and interviews on the spot, we came to our main concern—industrial design. Moholy fostered this with stubborn energy. Two lighting firms . . . helped us enormously with practical introduction into the laws of lighting technique and the production methods, which not only helped us with designing, but also helped the firms."[21]

All the years of struggle and change at the Bauhaus seemed to coalesce in the lighting designs which truly revolutionized the light fixtures industry. Working with new combinations of materials, especially metal and glass, Bauhaus students achieved congruity of form and function with genuinely innovative solutions that are now taken for granted. Today almost every craft studio as well as most homes and offices possess at least one lamp that is based on a Bauhaus design.

In 1927 the Bauhaus finally established a formal department of architecture under the Swiss architect Hannes Meyer. The following year Gropius resigned and appointed Meyer as the school's director. Once again the Bauhaus direction changed. Meyer felt the workshops had placed too much emphasis on "art" resulting in a preoccupation with form without giving enough consideration to techniques of production and demands of the marketplace. Concerned that the Bauhaus would become a trade school, Moholy resigned. Following his departure, Meyer reorganized the school, placing the emphasis on the architecture department. The metal, wall-painting and furniture workshops were combined under the heading of interior design and at this point metalwork ceased to be a vital area of the Bauhaus.

In 1930 Meyer resigned and was replaced by Ludwig Mies van der Rohe. Under Mies the Bauhaus developed into an academy of architecture and curtailed workshop production. In 1932, hounded by the Nazis, Mies moved the Bauhaus to Berlin. Six months later, in July 1933, the Nazis closed the school, seemingly for the last time.

Top: Wolfgang Tümpel, *Electric Water Boiler,* 1930s. Courtesy Museum für Kunst und Gewerbe, Hamburg; **center:** Naum Slutzky, *Teapot,* brass with matt chromium finish, ebony, 1924. Courtesy Victoria and Albert Museum; **above:** Marianne Brandt, *Table Lamp,* nickel-plated and lacquered metal, 9¼" h., c. 1927. Collection: The Museum of Modern Art, NY. Phyllis B. Lambert Fund

Gropius's primary goal for the Bauhaus, to revitalize design, was undeniably achieved. Yet, in the process, a "Bauhaus style" emerged, a codification that Gropius dogmatically opposed. He argued that the propagation of any style, system, formula or vogue, any preconceived idea of form, "would have been a confession of failure and a return to the very stagnation which I had called into being to combat."[22] But the school's impact on design today can be measured by the fact that the term "modern style" is synonymous with hard-edge, geometric forms in steel and glass, whether buildings or home furnishings, which are based on Bauhaus designs. Surely this cannot be characterized as a failure.

Notes:

1. Walter Scheidig, *Crafts of the Weimar Bauhaus 1919-1924,* Studio Vista, 1967, p.11
2. Gillian Naylor, *The Bauhaus* Studio Vista, 1968 p. 7
3. Ibid.; p. 60
4. Hans M. Wingler, *The Bauhaus Weimar Dessau Berlin Chicago,* MIT Press, 1969, p. 36
5. Naylor, op. cit., p. 34
6. Ibid., p. 224
7. Gillian Naylor, *The Bauhaus Reassessed,* Herbert Press, 1985, p. 111
8. Wingler, op. cit., p. 317
9. Naylor, *The Bauhaus Reassessed,* op. cit., p. 112
10. Nikolaus Pevsner, "Finsterlin," *Architectural Review,* November, 1962, p. 132
11. Naylor, *The Bauhaus,* op. cit., p. 101
12. Naylor, *The Bauhaus Reassessed,* op. cit., p. 111
13. Sybil Moholy-Nagy, *Moholy-Nagy: Experiment in Totality,* MIT Press, 1969, p. 204
14. Naylor, *The Bauhaus,* op. cit., p. 114
15. Ibid., p. 110
16. *Bauhaus 1919-28,* eds Herbert Sayer, Walter Gropius, Ise Gropius, Museum of Modern Art, 1938, p. 134
17. Naylor *The Bauhaus Reassessed,* op. cit., p. 148
18. Ibid., p. 126
19. Ibid., p. 145
20. *Bauhaus 1919-28,* op. cit., p. 136
21. Naylor *The Bauhaus Reassessed,* op. cit., p. 147
22. Ludwig Hirschfeld-Mack, *The Bauhaus,* Longmans, Green & Co., 1963, p. 1

Further Reading:

Bayer, Herbert, Gropius, Walter, Gropius, Ise (eds.), *Bauhaus 1919-1928,* New York: Museum of Modern Art, 1938
"Fifty Years Bauhaus," London: Royal Academy of Art, 1968
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Itten, Johannes, *Design and Form,* London: Thames & Hudson, 1964
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Naylor, Gillian, *The Bauhaus,* London: Studio Vista Ltd., 1968. *The Bauhaus Reassessed,* London: Herbert Press, 1985
Pevsner, Nikolaus, "Finsterlin," *Architectural Review,* November, 1962
Scheidig, Walter, *Crafts of the Weimar Bauhaus 1919-1924,* London: Studio Vista Ltd., 1967
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Reviews

Body Work

Alberta College of Art, Calgary, Alberta
January 9-Feb 5, 1986
The Works, Edmonton, Alberta
June 27-July 6, 1986
by Mary Beth LaViolette

"Body Work" not only offered a tantalizing look at contemporary Canadian artists but also brought into focus a number of developments that have characterized the new international movement in jewelry. This includes the obvious shift from precious to nonprecious materials as well as the response of jewelry artists to the many cross-currents lapping our visual culture.

Another highlight of the exhibition was the attempt to go beyond a purely decorative orientation into the realm of content. One of the strongest examples is the iconic jewelry of Pamela Ritchie. Using postage stamps combined with wood, acrylic and sometimes silver and gold, Ritchie's brooches, earrings and neckpieces cleverly play on the political and social order so often reflected in stamps. Also meaningful, David Didur's sculptural brooches made from ebony and metals like silver and copper are quiet reflections on the archeological probings of tribal arts.

Ornament as statement—which is how Nancy Tousley, author of "Body Work's" excellent catalog, describes the major thread in contemporary jewelry—is further demonstrated by the theatrical work of Kai Chan. Chan's sinewy forms of bamboo, rattan and papier-mâché envelop the body in a statement that is boldly exotic.

Although Chan's wearable objects, at least in a Western sense, stretch the boundaries of ornamentation, there are other examples—from Betty Walton, Kye-yeon Son and Jackie Anderson—that also reflect on how jewelry is seen and worn. With Walton, the shoulder is used to support a contoured metal brooch, while, in another piece, the back of the head is beautifully accented with a fountainlike spray of metal threads. As for Kye-yeon Son, her stickpins find two places of habitation, on the body and in plastic stands that evoke a sense of serene landscape. Some of Jackie Anderson's brooches and earrings also have a duality of purpose—belonging not only on the figure but also on flat surfaces as objets d'art. Anderson's jewlery is based on commercial signs whose visual elements have been appropriated and reworked into a quirky pastiche of forms and colors. They contain strong echoes of architecture and design, ranging from the elegant gestures of Art Deco to the tackiness of 50s neon.

By taking inspiration, particularly from popular culture, Anderson and others in "Body Work" have created work that is immediate in its currency, exciting in its transformation and exuberant in its eclecticism. It also seems to have some fun, as evident in the asymmetrical New Wave accessories of Michael and Paula Letki and the helmetlike head piece of Ken Vickerson with its overtones of an interplanetary future.

An illustrated catalog with essays is available from the Alberta College of Art Gallery, 1407-14 Avenue N.W., Calgary, Alberta T2N 4R3, Canada.

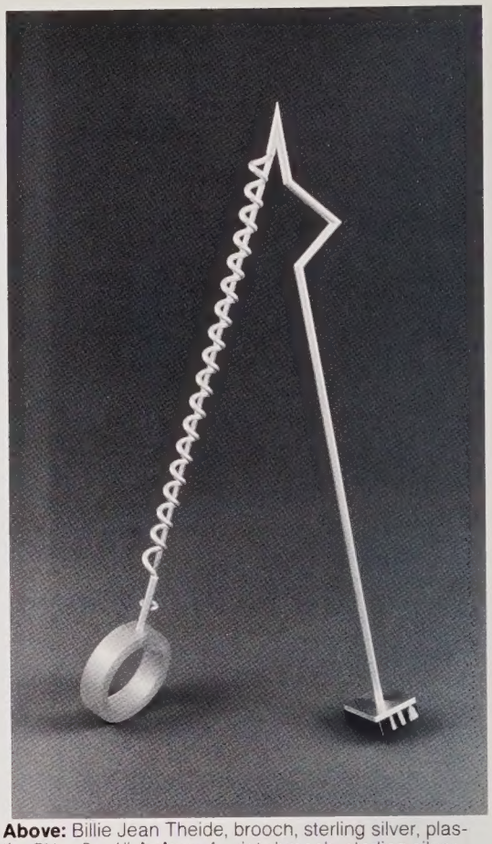
Billie Jean Theide: Perspectives

Quadrum Gallery, Chestnut Hill, MA
July 8–31, 1986
by C.M. Jacobi

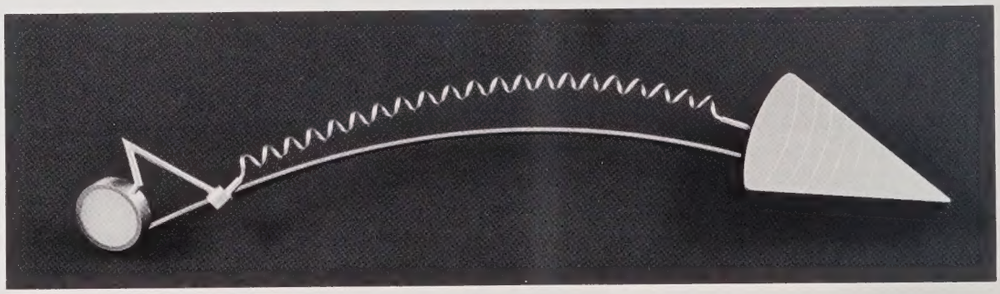
Billie Jean Theide addresses the essential idea of function in jewelry not with a vocabulary about the wearing of it, but rather, a combined vocabulary of ideas in techtonics, architecture and sculpture. The idea that the function of the wearable object is to speak of nothing but itself is surpassed by the idea that this object is, and indeed must be, built.

The major work in the exhibition, a mirror fabricated fo sterling and plastic, presents itself as a dialogue of materials and construction. In other pieces, the organization of similar formal elements and the establishment of systems for these elements carries on the dialectic. In *Complements,* a sterling and plastic brooch, these elements and the systems of their organization are simultaneously analyzed within each side of the piece. Basic formal elements on each end of the brooch are bridged to a restructured version of these elements on the opposing ends.

It is in this topic of techtonic dialogue that the strength of the work lies. Theide redirects the source of the functional aspect of her work in this manner. Unfortunately, the decontextualization of these pieces in the exhibit's display diluted that strength. Ideas of building and architecture were displayed not with the attitude of being individual statements, but that they are, as a group, jewelry.



Above: Billie Jean Theide, brooch, sterling silver, plastic, 5½ x 3 x 1"; **below:** *Anxiety* brooch, sterling silver, plastic, 6 x 1 x ½"



Right: Betty Walton, *Untitled* collar/head piece. Courtesy: John Dean and Alberta College of Art

Moshe Zabari: A Twenty-Five Year Restrospective
The Jewish Museum, New York City
May 25–September 7, 1986
The Hebrew Union College Skirball Museum
Los Angeles, CA
September 30, 1986–March 1, 1987
The Jewish Museum of Australia, Melbourne
June–August, 1987
by Bernard Bernstein

If you do not enjoy reading exhibition reviews you can treat the next sentence as a concluding statement, resolve to act on it, and go on to something else. A one-person exhibition of this type is so rare, significant and of such high quality that you should afford yourself the gift of seeing it, and if that is not possible, the next best thing is to buy and absorb the superbly written and illustrated catalog. If this sounds hyperbolic, try to recall how many 25-year retrospectives featuring holloware you have seen in your lifetime; and of these, how many were exclusively Jewish ceremonial art.

There are a few unique professionals, who appear outside the established norms, who work at their craft as if driven, and emerge years later with a burst of achievement. Moshe Zabari seems to have followed this pattern. He hasn't been involved with craft groups. He doesn't publish. He doesn't exhibit very much. He doesn't make speeches, attend conferences or travel the craft-fair circuit. He is so unconnected to the conventional channels of craft world publicity that there was no mention of this major exhibition in the calendar of the June/July issue of *American Craft* magazine. Although Zabari is very well known in the world of Jewish ceremonial art, he is hardly known in the metalsmithing world, and one goal of this review is to rectify this situation.

The setting for Zabari's work is the Tobe Pascher Workshop at the Jewish Museum in New York, where he functions as workshop director, artist-in-residence and instructor. Until I am corrected, I will say that the workshop is the only one of its kind in the world. Founded in 1956 by Dr. Abram Kanof and his wife Dr. Frances Pascher, the workshop's purpose is to encourage and teach the design and execution of Jewish ceremonial objects in a contemporary style. This might not seem unusual, but it was when one considers that Jewish ceremonial objects remained trapped in the baroque, rococo and neo-classical modes until the 1930s when the legendary Ludwig Wolpert introduced a Bauhaus-inspired esthetic. Wolpert had been the director of the workshop from its founding in 1956 until his death in 1981. Zabari, who had been his student in Israel came here to assist him in 1961 and became workshop director in 1982.

The catalog of this exhibition, written by its curator, Nancy Berman, gives a detailed, sensitive, chronological account of the development of Zabari's career, the evolution of his style and range and, most important, the tributaries that feed the formal and iconographic content of his work. If you have even a superficial interest in holloware in general or Jewish liturgical art in particular, you should send for this book so I need not repeat here what Nancy Berman has already said so well.

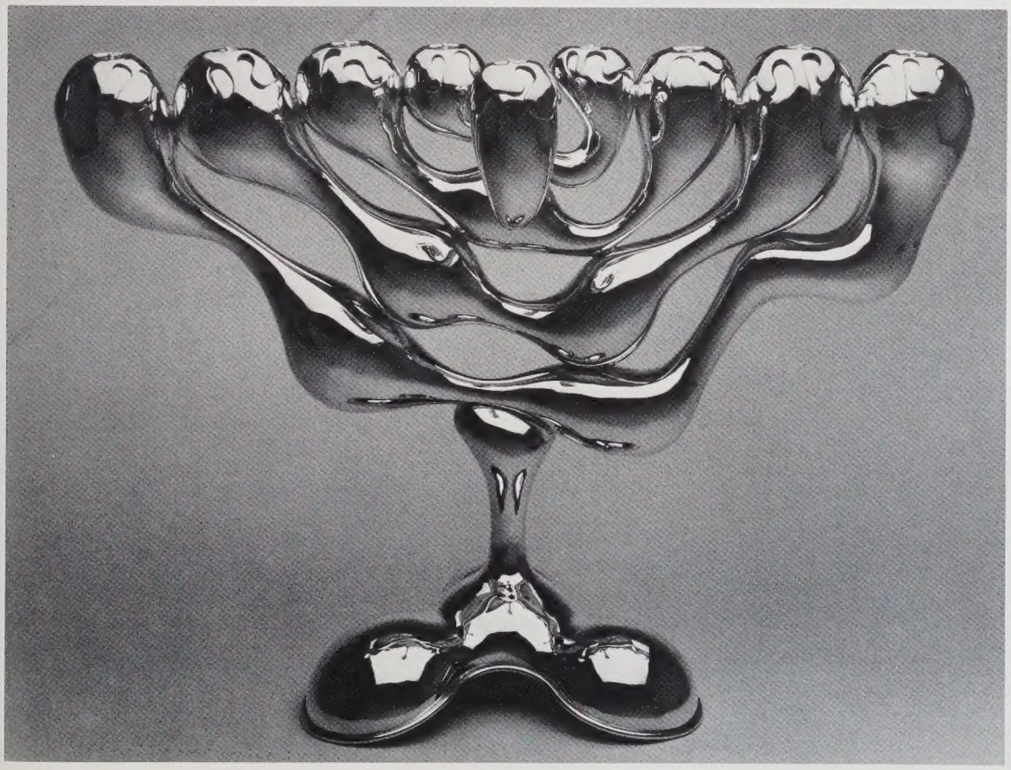
For Zabari, the dozens of ceremonial objects, from the small marriage rings to the monumental Torah arks, bring their content with them. He doesn't have to invent content as much as uncover and interpret it. Aside from the technical wizardry and formal ingenuity that characterize his pieces, the quality that lifts them out of the ordinary is the subtlety and variety of their iconography. Ceremonial art, Jewish and Christian, past and present, suffers from a monotonous repetition of a few basic symbols presented in stereotypical ways. Zabari doesn't let this happen. He has taken as a foundation the intimate knowledge of religious observance and ritual that was part of his daily experience of growing up in Israel and built on it with a scholar's drive for sifting through the layers of Jewish history, tradition, folklore, art, archeology and literature.

Moshe Zabari's forms, surfaces and decorations are not arbitrary but contain messages, symbols and references. His triangular plate, used on Purim, is based on the triangular shape of the *hamantasch,* a pastry eaten during that festival. The original source of the triangular shape is the hat worn by Haman, the villain of the biblical Book of Esther, which inspired the Purim festival itself. Texture also has significance. A randomly etched surface or one with irregularly shaped and spaced openings may remind us of the ancient scrolls, with their eroded surfaces and edges. The Hebrew alphabet, for centuries the subject of mystical interest, enjoys a special place in Zabari's visual inventory. It identifies the piece as a ritual object; it refers to its special function and it plays a role in ornament.

Formally, Zabari's work has been strengthened as it evolved out of the early phase, which was Bauhaus-rooted, functionalist, geometric, sparsely ornamented and safe into his recent work, which is organic, emotionally expressive, more involved with surface embellishment and riskier. When viewed against the background of the traditional conservatism of ceremonial art, this new work is downright revolutionary.

To repeat, these few words are only here to tease you about the work of a prolific but not widely recognized master. He is one of the few who has cultivated the secluded garden that is Jewish ceremonial art and made it bloom. In this sense, he is part of the extended family of pioneers who did the same for the desert that was Palestine.

The 48-page catalog is available from The Jewish Museum, 1109 Fifth Avenue, New York, NY 10028 for $7.95 plus $2.50 packing and shipping. NY State residents, add $.66 tax. Address inquiries on catalog sales in California to Hebrew Union College, Skirball Museum, 3077 Univeristy Mall, Los Angeles, CA 90007.



Left: Moshe Zabari, *Chanukkiah,* sterling silver, gold, 12½ x 17¾ x 7⅞", 1985; **below:** *Lior Kiddush Cup,* sterling silver, 4½ x 3⅝",d 1981. Collection: Eve Zabari

Pavel Opočenský
June 11-July 11, 1986
Helen Drutt Gallery, Philadelphia, PA
by Michael Dunas

Paul Opočenský's first solo show at the Helen Drutt Gallery breathes the salubrious air of sculptural abstraction. As contemporary jewelry gracefully weaves its way through the parade of modern styles—Cubism, Constructivism, Surrealism, Pop Art, Minimalism—it was only a matter of time before someone rediscovered the organic work of Brancusi, Arp and Moore for their purity of form, amorphous shapes and polished surfaces.

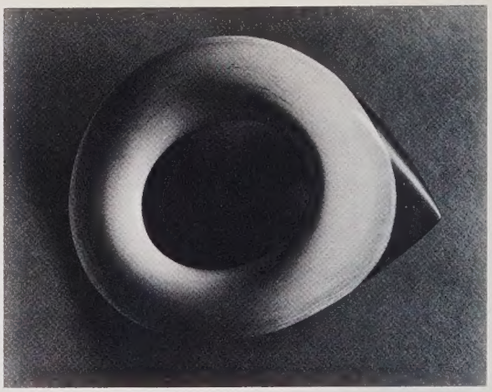
Born and trained in Czechoslovakia, Opočenský has maintained an independent studio in the United States since 1982. His 54 pieces on exhibit, carved primarily of ivory and ebony, maintain the dignity and austerity of their sculptural predecessors, though at times they seem enervated by the gratuitous pin backs and clasps that signal their function as jewelry.

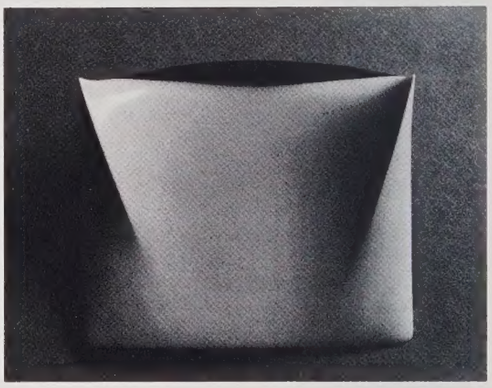
A superb craftsman, Opočenský imbues his material with elusive feelings for process. Through meticulous carving he responds to the subliminal attraction of instinct and fancy that is the craftman's communicative experience. Where sculpture in the round depends upon the eyes to discern its esthetic suitability, the reduced scale of jewelry trusts the corresponding sense of tactility. For the spectator, these objects are meant to be held, caressed, fingered in the manner of an ancient idol or talisman. They are the ineluctable workings not of the forces of nature but of a craftsman searching for the *élan vital* of nature.

Opočenský's shapes are starkly primitive. The shells, masks, ovoids, arrows, spears exude a lyrical affinity for him just as others experience a mysterious attraction for the unknown. His improvised works are free from cultural reference, as the process of carving these scaled-down forms inhibits all but the "bare bones" of the artist's gestural hand. The reductive esthetic, the restraint of authorial expression, the ambiguity of shapes places a burden on the spectator to summon a subconscious affinity in their appreciation.

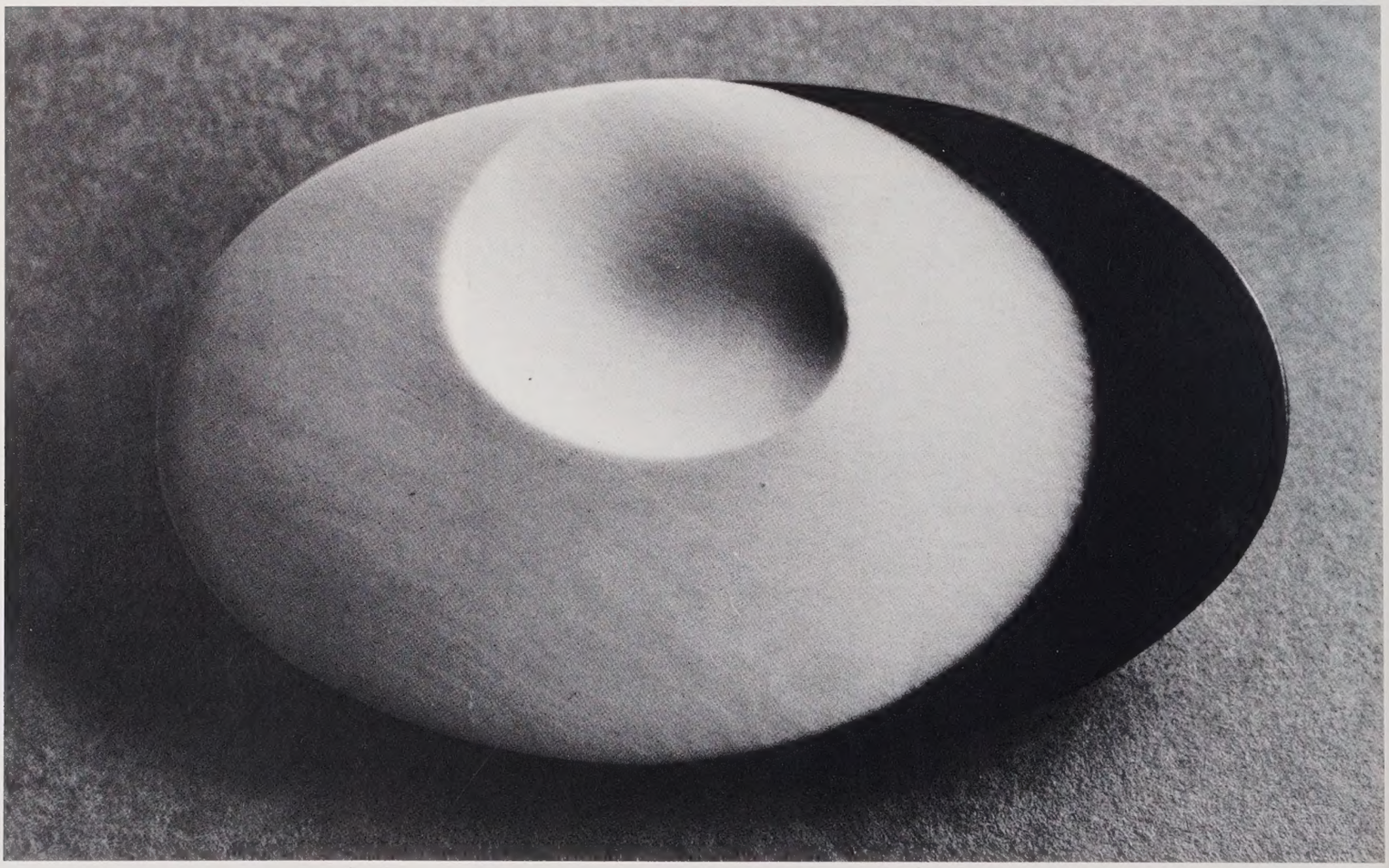
The limits of the carved gestures and the constant focusing of details, especially of the surface silhouettes, contribute an immediacy to the overall effect that is achieved far less in larger sculpture. The opacity of material and the finely worked patina that is Opočenskýidiom deny the contingency of light that interferes with our viscenal response. Opočenský relies on the illumination of grain in supplementary materials like horn and tortoise shell, inlaid and carved into an unbroken surface to create variety in contrast and chiarascuro. The evocative use of exotic woods like Cocobola, Lignum Vitae and Padauk magnifies the striations and color of an inchoate graphic language. The explorations of abstract patterning continue in the hazy bluish cast achieved by laminating ivory into ebony, while tension is ultimately achieved in the "veins" of tinted glue that float sinuously about the surface.

In display, these mystical globules appear as artifacts from a recent archaeological dig. Yet, like all good abstraction, their mesmerizing simplicity encourages a deeper introspection into elementary forms. As the dialectic of release and restraint, of fear and security play on our perceptions, we become respectful of the inherent power of material to elicit intimacy.





Top: Pavel Opocensky, *Bracelet,* ivory, ebony 5 x 1"; **above:** *Pin,* ivory, ebony, 3½ x 2½ x ¾"; **below:** *Pin,* ivory, ebony, 3½ x 2¼ x ½". Photos: Jan Frank



All That Glitters: Personal Ornaments
Cudahy Gallery of Wisconsin Art,
Milwaukee Art Museum, Milwaukee, WI
July 19-August 24, 1986
by Karl J. Moehl

No matter how rewarding the experience of viewing these works may have been, this exhibition had the appearance of being a jumbled affair, a chartless gazetteer. Fifty-six artists were represented by 285 works. Wisconsin claims them all.

The small works were scattered about the Cudahy, displayed on the sides of truncated pyramids as well as within more conventional horizontal and vertical cases. No consideration was given to grouping according to artist or stylistic affinity nor any other perceivable plan, although the total effect was not inharmonious. There was in fact a certain excitement of discovery involved in the puzzle. Each work was tagged by a miniscule number that did not relate to anything in the otherwise adequate catalog but could be traced to a price list.

This apparent return to the concept of the anonymous artisan is curious, and seemed at odds with the prevailing individualism evidenced by the artifacts. Pluralists to a fault, the Wisconsonians work in almost every conceivable medium, "ancient and otherwise," and, most of it doesn't glitter at all, unless you count "with ingenuity," which is all right by this reviewer.

Richard C. Schneider commanded the most space with what amounted to a ceramic précis of the history of human ornament. Seven female torsos, displayed characteristic adornment from as many historical figures, from Cleopatra to Belle Starr. This was witty, albeit predictable.

Beyond Schneider's scene-stealer, all one can do is single out personal favorites in a collection as wide and varied as this. No one could ever accuse Wisconsin for lacking in artistic talent, but on the other hand, any temperamental or geographic unity would be impossible to define. If there were any "trends." the installation managed to discourage their recognition.

Work by recent M.F.A. graduates, and even some currently working on their degrees, was shown along with that of their instructors. Young and old were shown intermixed without fear or favor. Robert Joseph Farrell, one of the youngest and least accredited, was also one of the boldest. His sterling and amber *Amazon Neckpiece no. 4* together with six of his other pieces attested to this fact. Agnes Chwae's *Paint Brush Sheath*, copper on bronze with a sawdust patina, is a "svelte" piece from another talented newcomer.

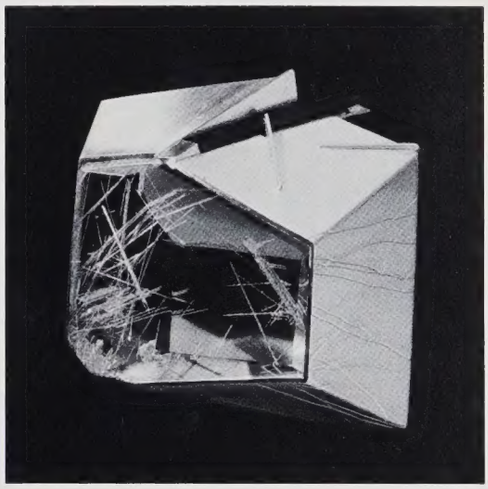
There were two outstanding works by Mary Dickery, *Primordial Stew* and *Neckpiece for Martha*. These are lumpy, but rich conglomerations of precious and nonprecious metals and stones, along with various textiles variously worked. Dickey has studied as far afield as West Africa, to great advantage. Her sensitivity to both modern and primitive esthetics result in an admixture that was perhaps the most gifted statement in the show.

Eleanor Moty offered eight small works, though termed brooches, they were outstanding for their inherent sculptural qualities. These were blocky, cubist, monumental in implication and splendid. Each piece involves silver and gold along with topaz and some sort of quartz (seven listed as "rutilated" and one as "tourmalinated"). All were fabricated with a refined touch.

Other than these, there was notable amusement in Elizabeth Tuttle's use of crocheting with glass and copper beads into stiff collars, cuffs and earrings. The real comic relief, however, came from Catherine Lamb Irion, who does nothing more than laminate small watercolor and pencil sketches in plastic. These glitter with real wit and imagination. So many try the childlike approach and achieve only tedium. Irion's is both high sophistication and low comedy, and they fit as well in the Cudahy as in the museum bookstore where they may also be found.

A statement in the catalog tells us that this Wisconsin show was held in conjunction with the *Objects of Adornment* show, also at the museum. The subtitle of this latter A.F.A. traveling show is *Five Thousand Years of Jewelry from the Walters Art Gallery, Baltimore*. The assumption is that the juxtaposition was purposeful and fruitful. It must have seemed like a good idea at the time.

As technically brilliant and clever as the Wisconsin artists may be, thrown into visual competition with the Walters' ageless treasures, the Badgers face the dilemma of our eclectic culture. The contemporary work lacks the sumptuousness, the glory, the splendor of old. At least, the locals make honest work with a flair and have not retreated into petulance and despair.



Top left: Mary Dickey, *Primordial Stew*, mixed media, 8½ x 5 x 1"; **below:** Catherine Lamb Irion, *Striped Wolf* pin, gouache, ink, lamination; **center, below:** Ric Markiewicz, *First Born*, 18k yellow, red, green, gold, Australian opal, 2 x 1½ x ½". Photo: P. Richard Eells; **bottom,** Eleanor Moty, *Triangle Brooch*, silver, 18k gold, topaz, rutilated quartz, 3½ x 2¾ x ½". Collection: Mrs. Samuel C. Johnson; **bottom, left:** Elizabeth Tuttle, *Georgian Ripple Collar*, jet, copper beads, 10¼ x 9"

Reports

Die Kugel-Glas & Metall

Gesellschaft für Goldschmiedekunst, Hanau, W. Germany
Spring 1986 and traveling until January 1987
by Anna Beatriz Chadour

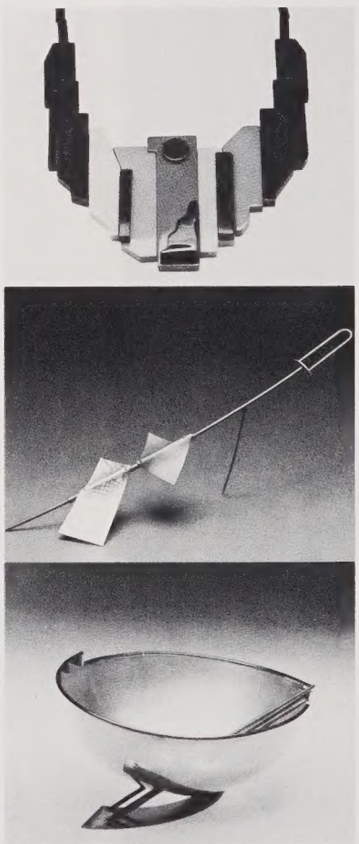
The Gesellschaft für Goldschmiedekunst and the Glashütte Limburg in Germany organized a competition to invigorate the thousand-year-old art of combining metal with glass. The Glashütte Limburg is an internationally renowned firm that still makes handblown glass for lamps. They supplied the gold- and silversmiths with massive glass balls of about seven centimeters in diameter, each to be transformed into an art object without practical purpose. The 82 entries came from all over Europe and the United States.

The competition revealed a wide range of forms and interpretations using a round glass body. The prevalent material chosen was silver, which yields optical effects of light and reflection on the curved surface of the transparent ball. Only seldom was gold used due to the fact that the warm tone of this material tends to react unfavorably with the glass. Color highlights were developed through enamel or light and dark contrasts of niello or blackened silver.

The crystal ball has a long tradition. Men and women in antiquity held a crystal ball in their hands for a cooling effect. In the Middle Ages, one believed in the magical power of the crystal ball. They were set on reliquaries, altar candlesticks or bishop's staffs. In fact, in Renaissance times crystal had the same value as gold.

The current artistic interpretations of the classic ball included geometric compositions where circle, half circle, cone, pyramid or triangle combined in harmony. Other sculptural objects pointed to political or philosophical ideas. The silhouette of the glass ball was in many cases associated with astronomy and astrology, i.e., Halley's Comet or the elements air, earth and water. The planet globe was a metaphor for humanity, inferring the beginning and end of life, as well as contrasting nature and the technical world.

Top: Jeff Wise, *Halleys Comet,* silver, glass, American walnut, 36 cm h.; **above:** Heidi Gerstacker, *Untitled,* silver, glass, 8 5 x 25 cm



Top: Francois Schoenlaub, *Collar,* milk plastic, 24 x 145 cm; **center:** Michel-Alain Forgues, *Untitled* brooch, sterling silver, 14 x 5 x 5 cm; **above: Kye Yeon Son,** *Deviating Lines,* sterling silver, copper, nickel, 12.5 x 26.25 cm

Grand Prix des Métiers d'Art: La Ligne

Maison de la Culture de Côte-des-Neiges, Montréal, Canada
June 27-August 30, 1986
by Claudette Pilon

The "Grand Prix des Métiers d'Art" is in its third consecutive year as a juried exhibition open to all Quebec's artisans. The theme this year was "the line." For the first time the show included an invitational section "Rendez-vous des Maitres-Artisans Paris-Montréal," which exhibited the work of 17 artists from France and Quebec. Jewelry was represented by Madeleine Dansereau and Jean Michel from Quebec, Marc Boissonnet and Goudji from France.

Jewelry was singled out from the other crafts in the show by the jury for its technical perfection, interest in design and profound respect for materials. Consequently, a third prize was given to jeweler Antoine Lamarche and 11 pieces by jewelers such as Kye-yeon Son, Louis-Jacques Suzor, Catherine Villeneuve and Michel-Alain Forgues were among 30 pieces in the show.

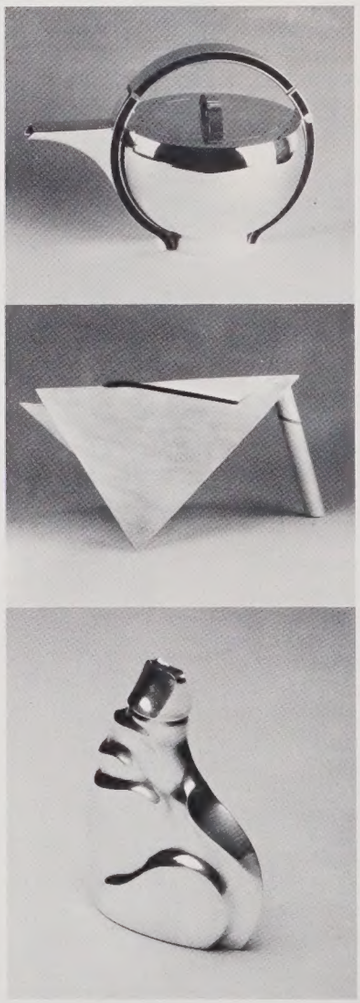
A free catalog may be obtained from Le Grand Prix des Métiers d'Art, 3702, Rue Saint-Denis, Montréal, Quebec H2X 3L7, Canada.

8th European Silver-triennale

Deutsches Goldschmiedehaus, Hanau, W. Germany
March 2-May 4, 1986 and traveling to January, 1987
by Anna Beatriz Chadour

Since 1965 the Gesellschaft für Goldschmiedekunst has organized the European Silvertriennale jointly with the Deutsches Goldschmiedehaus Hanau. The Triennale recurs for the 8th time in 1986. Entrees from 10 European countries: Austria, Denmark, Finland, Italy, Federal Republic of Germany, Great Britain, Netherlands, Norway, Sweden and Switzerland, 109 silversmiths, featured objects for both liturgical and secular use.

The basic aim and idea of the Triennale is to represent the wide range of technical and artistic possibilities inherent in the traditional craft of silversmithing. The Silvertriennale shows the wide range of styles from European traditions. Furthermore, insight is given into the various schools and training centers. In Germany, work from Düsseldorf, Hildesheim and Nürnberg favors linear geometry. The Scandinavians tend to prefer simplicity in design though often a hammered effect is achieved on the metal surface. The British entries often show a revival of the art of chiseling and engraving, in particular an inclination for detailed ornament. The famous Vakschool Schoonhoven, Netherlands, is also represented by various talented students and teachers who find soft outlines preferable. The Austrian silversmiths presented some interesting examples of liturgical silver.



Top: Bettina Maier, Federal Republic of Germany, *Teapot,* silver, copper, acrylic, 12.5 cm. h.; **center:** Andrew Putland, Great Britain, *Teapot,* silver, resin inlay, 16.5 cm. h.; **above:** Ragnar Hansen, Australia, *Flask,* silver, 13.5 x 10 cm

L'Art de l'Email

8th Biennale Internationale, Limoges, France
July-August, 1986
by Kathryn Regier Gough

After having attended the exhibitions in 1982 and 84, I saw marked improvement in the quality of work being shown this year. Opening the judging to an international panel took the show into the realm of "work judged on merit." It was a small show, and this improved the quality. This year, 19 percent of submitted pieces were accepted, as compared with 30 percent in the past. Out of 822 pieces submitted, 160 were exhibited, representing work by 85 people from 21 countries.

Some of the most interesting work is coming from behind the "Iron Curtain": U.S.S.R., Poland, Hungary and East Germany. A Biennale staff member told me that the Russians gather in Riga, work for one month and the pieces selected by a jury of bureaucrats are sent to Limoges. Nevertheless, a fair amount of dissident work was able to leave the country as well. Indoulys Ourbans's work (as in 84) left one with a feeling of unrest. This time, spikes projected from a pyramid covered with imagery of shadows, blood and people trying to escape. Catherine Amos's photoetched wall with padlocked doors had closed, enameled Venetian blinds. Léida Ylo's *De l'hiver au printemps* sculpture combined metalwork with enamel. The shoots of full-grown winter and budding srping wheat could well have been arrows and spikes. Top marks go to

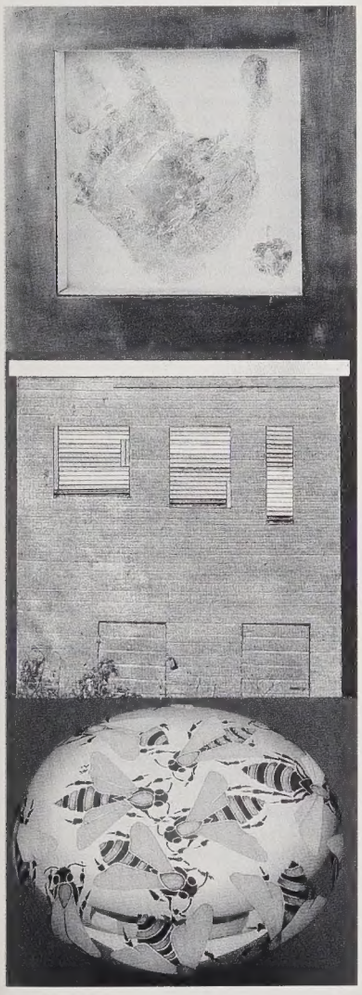
the 10 enamelists from U.S.S.R.

West Germany was a strong second with 17 exhibitors. Kai Hackeman received the prize for champlevé with his brilliant-colored enamels. Great Britain had some fine work in the Biennale, which incorporated more traditional methods, but was well executed. Three British pieces were purchased by a museum in Geneva, Switzerland, including a *Bee Box* by Philip Barnes. Barnes, a second-generation London jeweler, used fine cutting and piercing, then champlevé and basse-taille enameling in the cut-out areas.

Another feature of the 86 Biennale was the exhibition of work (six to 12 pieces) from each of the five award winners of 84.

Each year the staff of the Biennale extends an invitation to a country that has not previously submitted work to enter pieces that are not judged. This year, Italy was the invited country.

It's well worth the trip to Limoges. The Biennale has become an exciting new forum for worldwide enamels.



Top: Vladimir Tikhomirov, U.S.S.R., *Autumn*, 16 x 16 cm; **center:** Catherine Amos, U.S.S.R., *Colors of an Old House I*, 21.5 x 20.3 cm; Philip Barnes, *Bee Box*, silver, 7.5 x 3 cm

Books

Practical Casting: A Studio Reference

by Tim McCreight
pb, spiral-bound, available from Brynmorgen Press, Box 405E, Boylston, MA 01505, $10.95 plus $1.50 shipping

Casting is as old as metalwork itself. Up until now, there has not been a truly comprehensive book on casting jewelry, that is, a book written by and for professional craftsmen. Tim McCreight's latest book may well have been worth the wait.

With three other books under his belt, including his extremely successful *The Complete Metalsmith*, McCreight provides the answer to a jewelry caster's dream. Using his trademark homespun style, the author has written a top-notch book on casting and the allied procedures of spruing, investing, mold making, etc. McCreight has packed an awesome quantity of procedures, theories, tricks, tips and charts into his latest volume. He has also included a generous quantity of his own fine illustrations and a sprinkling of insightful proverbs to produce a handy workshop companion.

McCreight first explains the basics of casting and then goes on to a step-by-step approach to technique. Included are several esoteric yet valuable tips, such as how to make a spiral blade for sawing waxes by torch heating a conventional blade as you twist the ends. He describes how to add air vents to flasks for vacuum casting. He even presents a method for steam dewaxing a flask, rather than the traditional (and toxic, smoke-producing) kiln-burnout method. McCreight suggests intense scrutiny of the button from each casting. He states, "Observation of the button can give important clues about a casting [in order to] pinpoint trouble spots and figure out how to correct them in your next casting."

In all, *Practical Casting* is a wonderful book containing nearly everything you would ever want to know about small-scale casting. It is an absolute essential for every contemporary craftsman whether casting the first or ten-thousandth piece.
—Alan Revere

Jewellery of the Ancient World

by Jack Ogden
Rizzoli, NY, 1982, hc, 185 pp.

We have all had the experience of being in a museum and wanting to reach into the case to take hold of a favorite object. As makers, we want to experience directly the grace of form. We want to figure out how it was put together. We can't do that, at least not without being arrested, but in this marvelous book, Jack Ogden brings us the next best thing. With scientific precision and attention to detail he examines antiquities and explains their fine points. With the enthusiasm of an archaeologist he assembles a coherent picture of the ornament of the ancient world. The result is a sound scholarly tome that sparkles with unusual life and drama.

The author, founder of the British Society of Jewellery Historians, confines his book to the centuries from the beginning of the Bronze Age to the end of the Roman Period. Through photomicroscopic investigation and far-reaching cross references between documents, sculptures and artifacts, he shows us the methods and often the attitudes of our forebears. By coupling his personal analysis of many objects with a comprehensive knowledge of Classical and pre-Classical history, Ogden makes accessible to the reader the pleasures of a scholarly investigation.

Photos taken with an electron microscope show how wire was made before drawplates were invented and reveal unexpected facets of smelting and refining. As interesting as these bits of technical trivia are, they are only details of a larger picture of society. As Ogden says in his first chapter, "Jewellery . . . must be studied, like any other kind of archaeological remains, in the context of the people that fashioned it and the factors that led to its development and use."

An entire chapter is taken up with a discussion of forgeries and frauds, a practice that is apparently as old as jewelrymaking itself. For example, 2nd-century Romans liked to remount "ancient" gems and were often victims of fraud. Clues to the unraveling of these and other puzzles demand sophisticated chemistry, high-tech magnification and exhaustive research.

The book is a handsome production, featuring 37 color plates, most of them full page and none previously published. The photo quality is first rate and justifies the $50 price tag. This is a fascinating book for the metalsmith, the historian and the connoisseur of jewelry. I recommend it enthusiastically.
—Tim McCreight

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Metalsmith

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Compiled by
Joanne Polster

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NOE, Todd *6/2:27, 29 Sp86 (2ils, 1col)
NORTON, Deborah Lam de Wolf: Aspects Gallery, London, England. 6/3:58 Su86 (il); David Watkins: Crafts Council Gallery, London, England. 6/3:52-3 Su86 (5ils)
NORTON, Lisa illus: Expresso service. 6/3:32 Su86
NOTAN theory—Influence (Ruth Penington) 6/1:33-4 W86
NOVIN, Carolyn Frederick Lauritzen retrospective: Art Gallery, California State University, Northridge, CA. 6/4:54 F86 (3ils)
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O'HANRAHAN, Brigid exh rev 6/1:48 W86
OHIO metalsmiths—Exhibitions Ohio Metals invitational: Hiestand Gallery of Miami University, Oxford, OH. Robert Benson. 6/4:52-3 F86 (9ils)
ONE Is Silver, Woodstock, CT See: Yesberger, James R.
OPOCENSKY, Pavel exh rev 6/3:54, 55 Su86 (il)
OSHINSKY, Carol exh rev 6/2:49 Sp86 (2ils)
PALEY, Albert Excerpts from panel discussion given at SNAG's conference in Toronto 1985. 6/4:8-11 F86
PAPP, Tony *exh rev 6/4:51 F86 (4ils)
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PEARLS Pearls: their origin, treatment, and identification by Jean Taburiaux (bk rev). Tim McCreight. 6/2:51 Sp86
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PEFFERMAN, Durelle exh rev 6/1:42, 43 W86 (il)
PENINGTON, Ruth *6/1:30-35 W86 (9ils; por)
PENLAND School of Crafts—Anodizing symposium Color, color, color: more on aluminum & aluminum anodizing (based on notes, information and experience gained at symposium). Marvin Jensen. 6/4:32-5 F86 (5ils, 1col)
PENLAND School of Crafts—Symposium Revisioning the crafts: Penland School of Crafts, Penland, NC (review). Patricia Malarcher. 6/2:40-41 Sp86
PERU El Condor Pasa. Enid Kaplan. 6/4:12-17 F86 (19ils; 3drwgs)
PETERS, Jan exh rev 6/2:49 Sp86 (il)
PETERS, Susan Dodge Two in metals: William Baran-Mickle and Leonard Urso: Dawson Gallery, Rochester, NY. 6/4:46 F86 (2ils)
PETERSON, David Master metalsmith: Robert "Monty" Montgomery. 6/2:8-11 Sp86 (8ils; por)
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PHOTOGRAPHY A portable photographic studio. Dennis French. 6/2:53 Sp86 (3diags)
PIJANOWSKI, Hiroko and Gene illus: Brooch (platinum) 6/1:27 W86
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PLATINUM—History 6/1:25-27 W86
POLSTER, Joanne *Metalsmith* index to issues 5/1-5/4 (1985). 6/1:52-6 W86
PRODDOW, Mary "Jewels by Lalique in American collections": *Lalique and the Art Nouveau: an international jewelry symposium:* Fashion Institute of Technology, New York City (review). Charles Lewton-Brain. 6/2:39 Sp86
PRODUCTION jewelers Beyond the bench: part 5—James R. Yesberger, Alan Revere, Scott Keating, Michael and Paula Letki, Peggy Johnson, June Jasen. Akiko Busch. 6/3:36-41 Su86 (22ils);
PRODUCTION jewelry—Technique The joy of limited production. Yvonne Arritt. 6/4:18-19 F86 (5ils); See also: Electrical discharge machining (EDM); Investment casting
PROFESSIONAL practice See: Business practice
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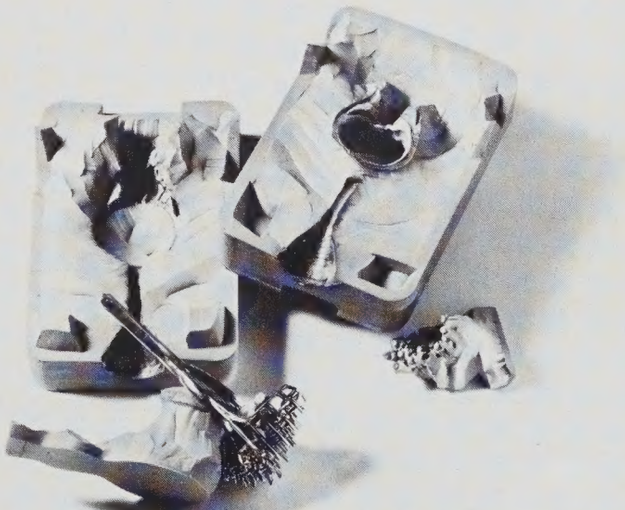

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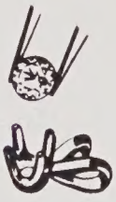

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SNAG

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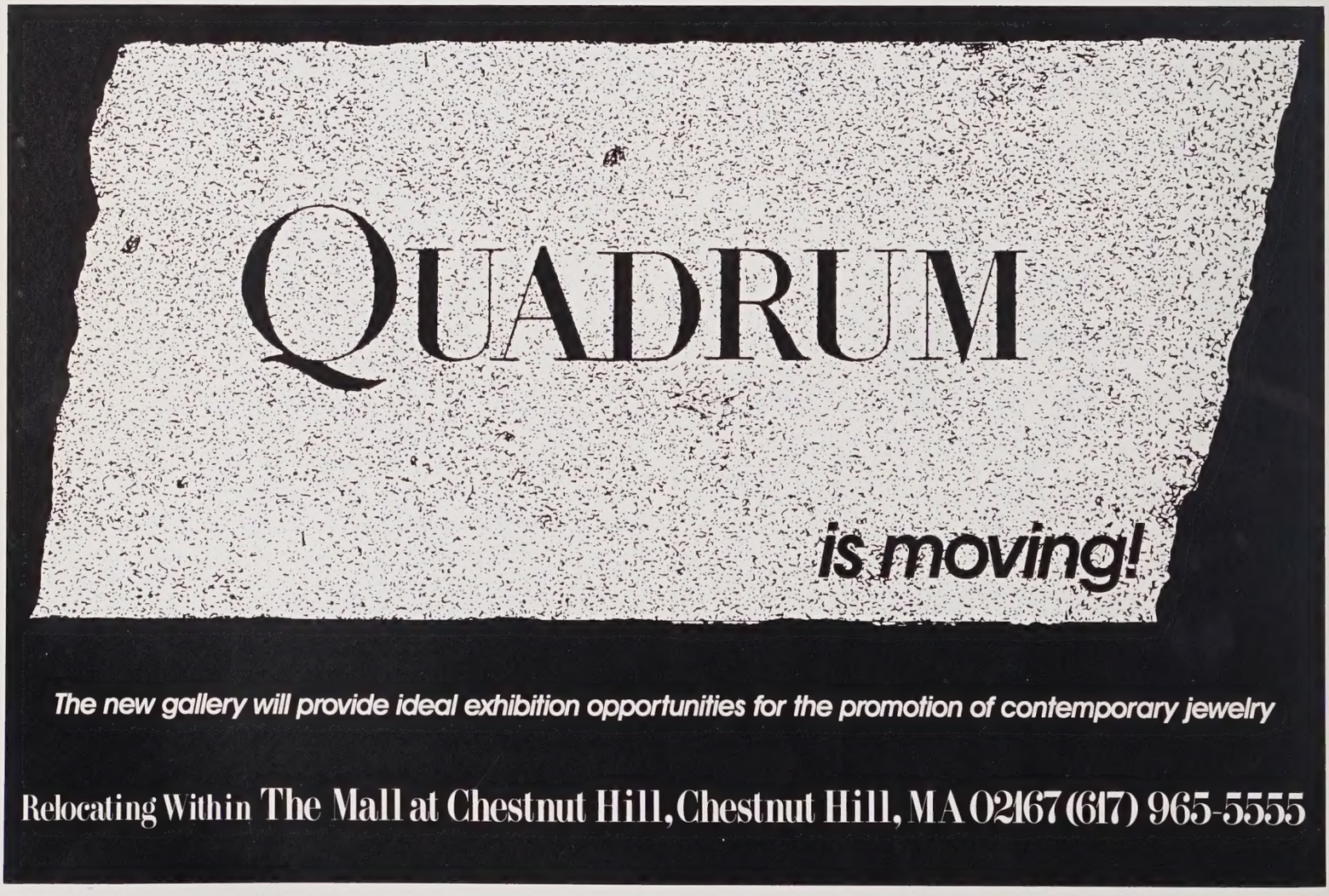
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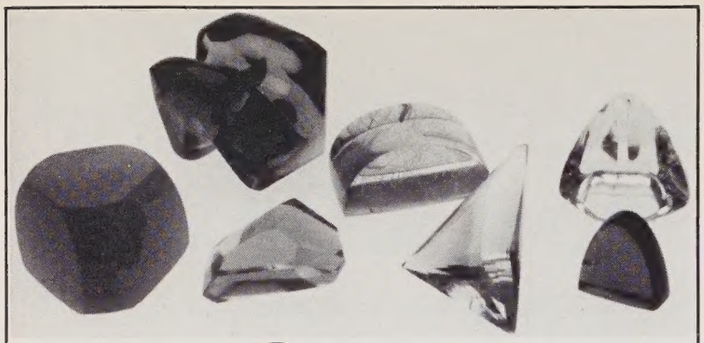

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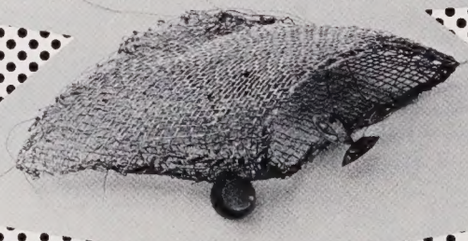

7

1 Sharon Church
2 Fran Merritt
3 David Tisdale
4 Mary Walker Phillips
5 Heikki Seppä
6 Mary Beth Rozkewicz
7 Arline Fisch

MEMBERSHIP

SOCIETY OF NORTH AMERICAN GOLDSMITHS

The Society of North American Goldsmiths (SNAG) was formed in 1970 to promote contemporary gold- and silversmithing. SNAG serves as a forum for the free exchange of ideas in the field.

Technical information, esthetic and educational issues, and other topics of interest to the practitioner and teacher of contemporary metalwork are disseminated by SNAG publications and conferences. Professionals and students, collectors, gallery owners and enthusiasts will all find SNAG interesting and useful. From pure sculpture to production jewelry, SNAG offers information on the entire range of the exciting field of metalsmithing.

Services

Each year, SNAG conducts a conference that attracts jewelers and silversmiths from all over the world. Major figures in the field speak on a multitude of topics. Each conference is held in a different location to allow the widest audience possible access to these lively and stimulating gatherings.

Periodically, SNAG sponsors major exhibitions of contemporary metalwork. In the past, SNAG shows have been mounted at the Renwick Gallery, the St. Paul Museum of Art and the Phoenix Museum of Art. A special exhibition of work by Distinguished Members traveled to major museums in Europe in 1979.

The Society operates a book ordering service, through which important texts on all aspects of the field can be ordered at a reduced price.

SNAG also operates a slide library and rental service, which contains the portfolios of Distinguished Members and other notable metalsmiths. Members can rent or purchase slides at minimal cost.

Publications

Metalsmith is the only magazine in America devoted solely to the metal arts. Prominent jewelers and designers, silversmiths, blacksmiths and sculptors are featured in full-length articles. Process and technique are explored in essays on design and production, materials and equipment. Regular columns by leading authorities discuss the latest gallery shows, newest books and current museum exhibitions.

The Newsletter is published bimonthly and is available to members only. It features timely information on exhibitions, workshops, conferences and job opportunities from all across the U.S. and Canada.

Membership

SNAG offers several types of memberships, each tailored to a specific level of involvement in the field of contemporary metalsmithing.

General Membership is open to everyone and includes subscriptions to *Metalsmith* and the SNAG Newsletter, reduced conference fees, access to all of SNAG's services and full voting privileges.

Distinguished Membership is a special juried category, which is conferred upon members who demonstrate outstanding contribution to the field. Special exhibitions and other privileges are available to these members. This category of membership includes all publications and other advantages described above.

Student Membership is offered at a reduced rate to anyone attending an accredited educational institution. This membership offers all the advantages of a *general membership* but does not carry voting privileges.

Institutional Membership is available for nonprofit organizations like schools and libraries. Institutions receive four issues of *Metalsmith* magazine per year.

Checks should be made payable to the Society of North American Goldsmiths (SNAG) in U.S. dollars only. Contributions are deductible within legal limits for tax purposes. Allow six to eight weeks to receive your first copy of *Metalsmith*.

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Historical articles trace the roots and development of metalwork in the styles and artists of the past.

Materials & Methods
An inside look at the precious and nonprecious materials and the unique methods of metalsmithing and jewelry.

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Each issue will seek out and explore significant new work in the fields of jewelry, enameling, holloware, blacksmithing and sculpture.

Masterpieces in Metal
Curators of well-known museums and collections from around the world examine important works, commenting on their technical, historical and esthetic significance.

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Each issue selects the most important shows for review. The emphasis is on a visual presentation of the major pieces and a critical appraisal of their contribution to the contemporary body of work being created in the field.

Business, Marketing and Education

- Where to find summer workshops and programs in metal
- How to market through galleries, stores and direct mail
- What books and other literature to read
- How to avoid health and safety hazards
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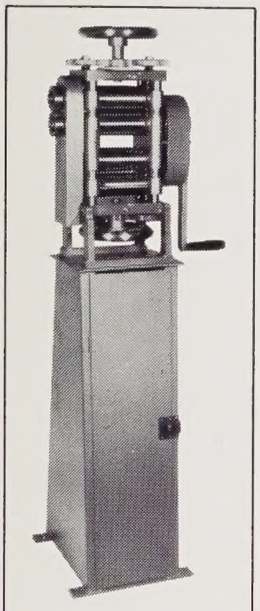

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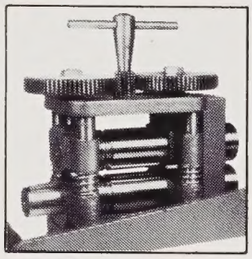

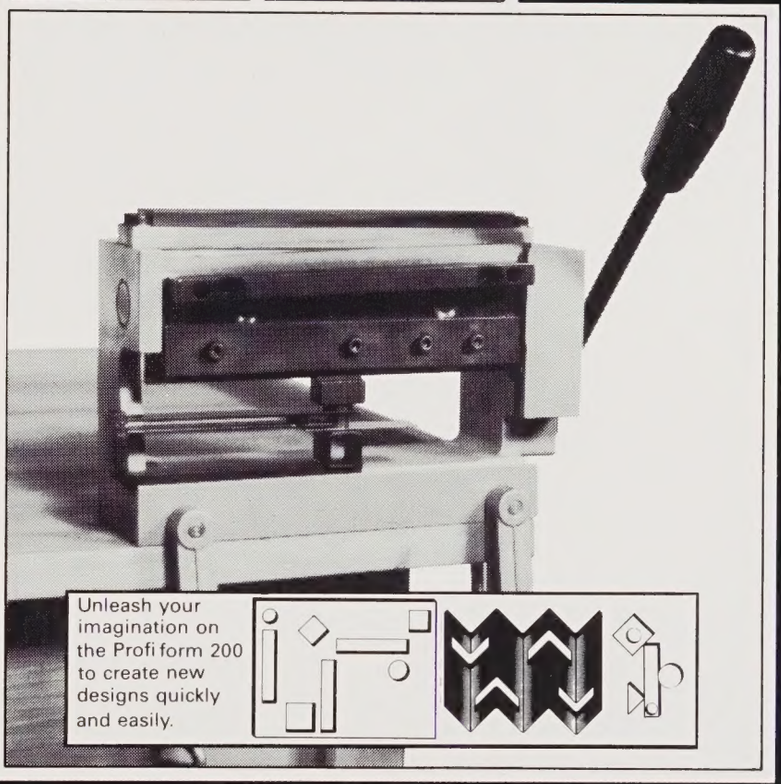

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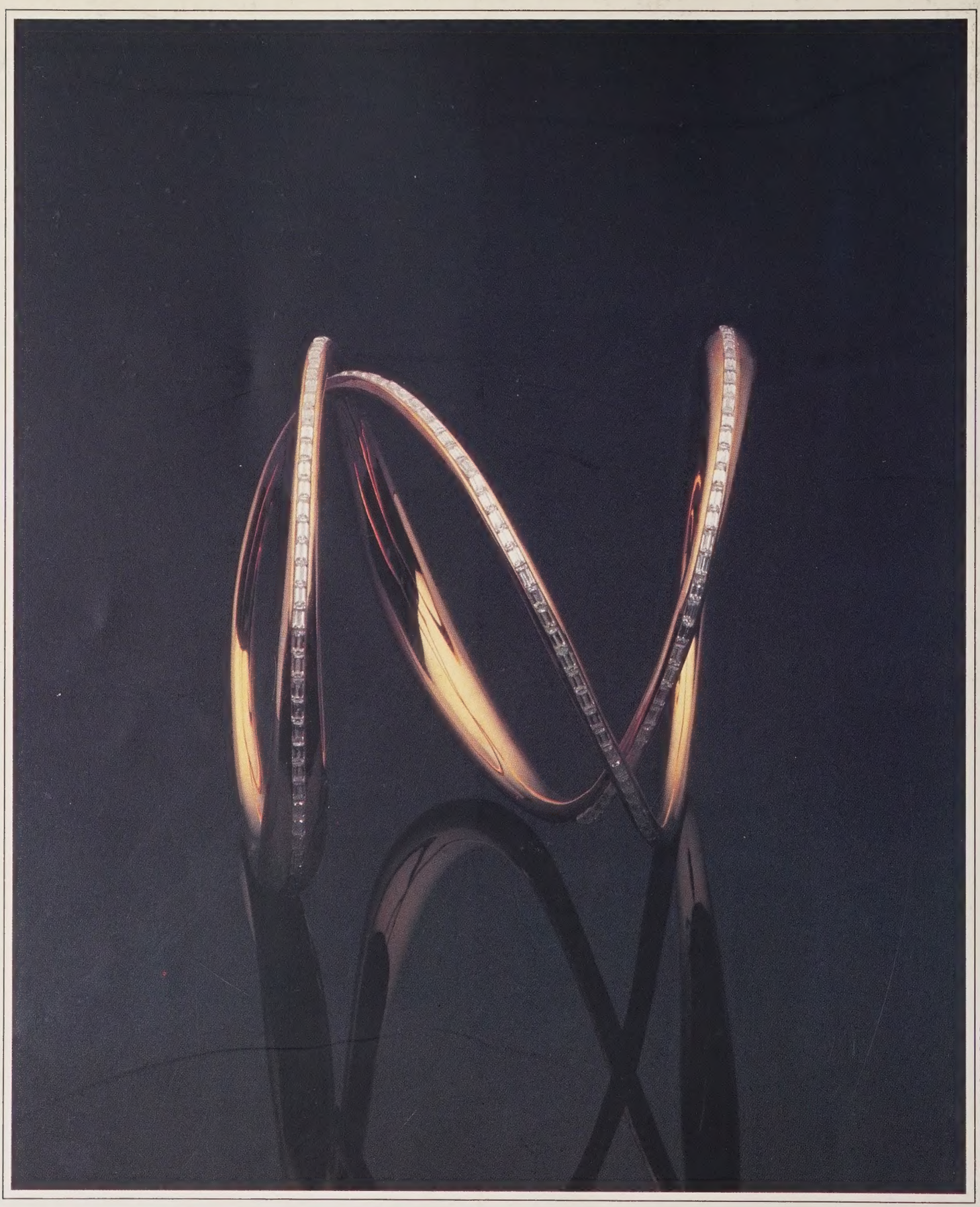

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